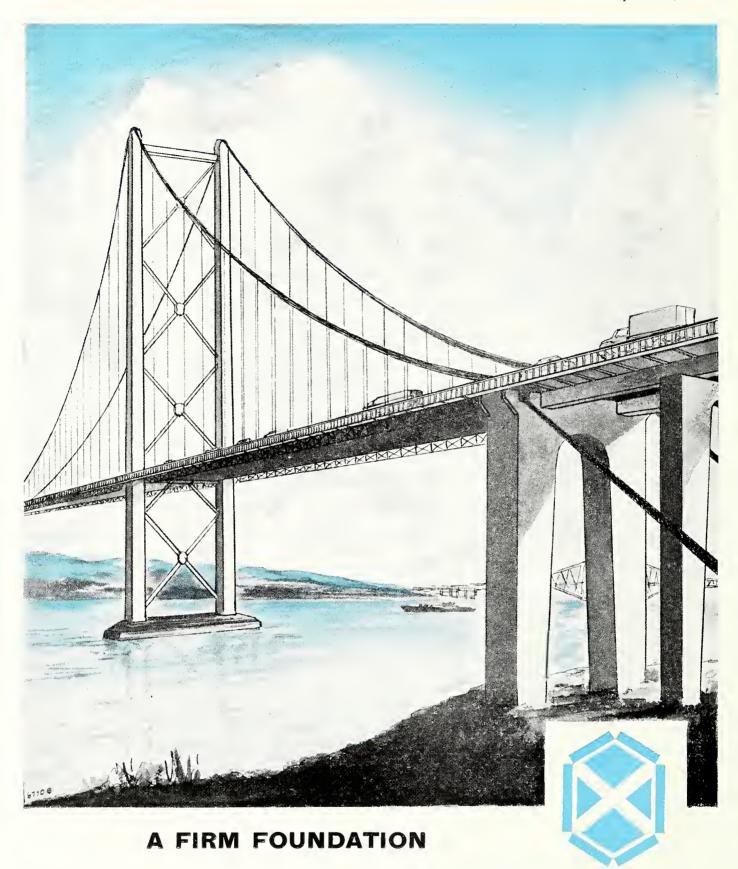
The CHEMISTAND DRUGGIST

For Retailer, Wholesaler and Manufacturer

APRIL 13 1963





Start with active principles manufactured by Macfarlan Smith, and your official and proprietary formulations will be soundly based. Leaders in alkaloids.

MACFARLAN SMITH LTD

WHEATFIELD ROAD · EDINBURGH 11





THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

THE WEEKLY NEWSPAPER FOR PHARMACY and all sections of the drug, pharmaceutical, fine chemical, cosmetic, and allied industries

Official organ of the Pharmaceutical Society of Ireland and of the Pharmaceutical Society of Northern Ireland

Volume 179

April 13, 1963

No. 4339

CONTENTS

Anthracene Derivatives of Natural Occur-

rence				399	
Correspondence	·			393	
Drug Testing U			eme	401	
Drugs Affecting				394	
Leading Article					
		y Moral Sanct	ion	395	
		ng February		395	
Leeds Joint Co				402	
Pharmaceutical	_			702	
1 .	-	Election Car		207	
dates		•••	• • •	397	
Pharmacies of	Britain	• • • • • • • • • • • • • • • • • • • •		396	
Photography in	1963			390	
"Safety of Dru	gs" Rep	ort		386	
Topical Reflect	tions	• • • • • • • • • • • • • • • • • • • •		385	
Branch Events	392	Manufaoturers'	Activ	ities .	390
Business Changes	389	New Products			391
Coming Events	407	N.H.S. Statistic	es		400
Commercial Television	407	Patents			408
Company News	388	Personalities			389
Contemporary Themes	408	Print and Publ			407
Deaths	389	Salesmanship P			
Expansion Plans	407	Trade Marks			408
Information Wanted	390	Trade Notes	• • • •		390
In Parliament	388	Trade Report			405
Legal Reports Local Officers	388	Wills World Trade			408 408
Local Officers	363	World Trade	• - •		400

Index to Advertisers, p. 5. Classified Advertisements, p. 31. Cumulative price list (home copies only): loose supplement.

PUBLISHED BY

MORGAN BROTHERS (PUBLISHERS), LTD., at 28 Essex Street, Strand, London, W.C.2

Telephone: Central 6565

Telegrams: Chemicus, Estrand, London

MEMBER OF THE AUDIT BUREAU OF CIRCULATIONS

MORGAN BROTHERS (PUBLISHERS), LTD. 1963

GLASGOW: 169 Nether Auldhouse Road, S.3. Phone: Langside 2679. LEEDS, 16: 32 Wynford Rise, West Park, Phone: Leeds 67 8438. WOLVERHAMPTON: 89 Woodland Avenue, Tettenhall Wood. Phone: Wolverhampton 52301,

ANNUAL SUBSCRIPTION

which includes The Chemist and Druggist Diary and Year Book, £3 10s. Single copies 1s. 3d. each (postage 5d.).



'I'VE GOT MY HANDS FULL, I'M SO TIRED...'



'I CAN'T FACE BIG MEALS THESE DAYS...'

Your customers have special problems

Despite the social services the pharmacist is still confronted daily with the problems of two special groups of people: expectant and nursing mothers, and the elderly. Between them these two groups make up more than one third of all his customers. To help them, Vitamins Limited provide the following preparations. For prescription and counter.

PREGNAVITE FORTE Provides iron and vitamins for pregnant and nursing mothers. JUVEL Designed for and especially suited to the needs of the elderly.



Volume 179

APRIL 13, 1963

No. 4339

Safety of Drugs

SOCIETY OPPOSES VOLUNTARY SCHEME

THE Pharmaceutical Society has sent letters to all Members of Parliament urging them to press the Government to bring in legislation for the testing and supervision of new drugs, and disagreeing with the Government decision to set up a voluntary scheme as recommended in the report of the joint subcommittee on the safety of drugs under the chairmanship of Lord Cohen (see p. 386).

Manufacturers would still be responsible for the testing of drugs but would be compelled to produce evidence to a central body before marketing. The Society supports the views of the pharmacist members of the Committee (Mr. J. B. Grosset and Sir Hugh Linstead) who, in a "note of dissent," urge that there should be a comprehensive statute dealing with all medicines.

Retail Sales

BOARD OF TRADE FIGURES

RECENTLY issued Board of Trade statistics show that sales of chemists' goods by independent retailers were 3.7 per cent. lower in February compared with January but 0.9 per cent. higher than in February 1962. Multiple retailers' sales were unchanged in February compared with January, and 7.2 per cent. higher than in February 1962. Sales by Co-operative societies were 0.9 per cent. higher in February compared with January and 2.7 per cent. higher compared with February 1962. The figures do not allow for receipts under the National Health Service.

Botanical Drug Imports

REMOVAL OF DUTY SOUGHT

THE Board of Trade is considering an application for removal of the import duty on certain botanical drugs classified under Tariff headings 12.07(E)(2); 13.02(B) and 13.03(D). A statement of the applicant's case will be made available to interested parties if they are prepared to give an undertaking to treat the information contained therein as strictly confidential and to allow their comments to be passed to the applicants for reply. Requests for the statement of case, together with an undertaking in the terms set out above, should be addressed in writing to the Tariff and Import Policy Division, Board of Trade, Horse Guards Avenue, London, S.W.1, not later than April 23. The botanicals are:—

Caraway seeds, barbasco root (cube (Lonchocarpus nicou) bark and root), boldo

leaves, burdock root, calumba root, colchicum corms, colchicum seeds, condurango, dandelion root, deer tongue leaves, gelsem root, horehound herb, passion flower herb, pichi tops, rhapontic rhubarb, sabadilla seeds, sassafras bark, saw palmetto berries, sculicap herb, serpentaria root, stillingia root, stone root, white pine bark, yerba santa, balsam copaiba, balsam Peru, gum ammoniacum, gum asafoetida, gum galbanum, gum myrrh, gum olibanum, gum opoponax and liquorice extract (excluding solid extracts prepared to British Pharmaceutical Codex standards.

Hospital Service Costs

MINISTER RECEIVES DEPUTATION

THE Minister of Health (Mr. E. Powell) recently received a deputation from the staff side of the General Whitley Council for the Health Services. The deputation said that some measures taken by hospital authorities to keep within their financial allocations for running costs, including dismissals of industrial staff in some areas, had had a bad effect, both on the efficiency of the hospital service and on the morale of the staff. They felt that the situation required action from the Minister to ensure that similar troubles would not recur. The Minister said that the authorities were being given a steady increase in their spending power to enable them to bring about planned improvements. It was for them to decide how to spend the money, but he expected that experience gained in 1962-63 would ensure a more even application during the ensuing year.

Pharmaceuticals Charge

LABOUR'S LEADER ANSWERS AMERICANS

MR. Harold Wilson, leader of the Labour Party, told a questioner at the National Press Club in Washington, U.S.A., on April 1, that it was not the intention of the Labour Party to nationalise the pharmaceutical industry if it came into power. But the Party wanted to prevent exploitation of the taxpayer.

"I am sorry to say that some of the subsidiaries of the American pharmaceutical companies have been making a cool 70 per cent. on capital out of the taxpayers, and spending far too much on advertising, and pressuring doctors to prescribe what otherwise they would not prescribe."

Modern Cosmetics

ILLUSION AND REALITY

THEME of a lecture given by Dr. T. J. Elliott (Innoxa (England), Ltd.), to the Society of Cosmetic Chemists on March 25, was the discrepancy between expectations and performance of present-day cosmetics and toiletries, and whether that discrepancy was due to exaggerated advertising or to technical shortcomings of the products. In hair lacquers, de-pilatories, shampoos, etc., he said that the discrepancy was not regarded as serious, those products being technically competent. On coloured make-up items (particularly lipsticks and conventional eye make-up) the discrepancy was greater, partly because of more sophisticated advertising, but also because of serious technical defects in many of the products on the market (for example, lock of durchility in group and etick lack of durability in cream and stick eye shadows and change in colour and poor appearance on the lips of pastel lipsticks. He doubted the possibility of producing visible improvements in skin appearance with cosmetic creams, taking into account the over-riding necessity for cosmetics to be harmless to all users, even when misused.



MAYOR AT SALFORD SOAP WORKS: The Kersal Vale factory of Cussons, Sons & Co., Ltd., recently had its first civic visit since its £350,000 replanning and improvement scheme was completed. The mayor and mayoress of Salford (Councillor and Mrs. T. Mellor) were escorted through main departments by directors of the company, In the picture the mayor is watching containers being filled with solid brilliantine, At left is Mr, J, A, Betley (managing director)

Agricultural Chemicals

ADDITIONS TO APPROVED LIST

THE following insecticides have been approved under the Agricultural Chemicals Approval Scheme of the Agricultural Departments of the United Kingdom:—

DISULFOTON. A systemic organo-phosphorous insecticide for the control of aphids on sugar beet, potatoes, brussels sprouts, cabbages and cauliflowers. Granular formulations: Disyston (Baywood Chemicals, Ltd.).

PHORATE. A systemic organo-phosphorous insecticide for the control of aphids on sugar beet and potatoes. Granular Formulations: Thimet Phorate 10 per cent. granules (Cyanamid of Great Britain, Ltd.).

Fungicides

SULPHUR, COLLOIDAL AND WETTABLE FOR-MULATIONS: Baywood wettable sulphur (Baywood Chemicals, Ltd.).

Herbicides

2,4-D. Formulations of the acid specifically for the selective control of weeds on farm roadside verges, hedge banks and around farm buildings. FORMULATIONS IN OIL: Vergemaster (Baywood Chemicals, Ltd.).

Dichlorprop with 2,4-D. A mixture of translocated herbicides for post-emergence use in cereals to control a range of broadleaved annual and perennial weeds. Amine formulations: Marks Polytox-M (A. H. Marks & Co., Ltd.).

DICHLORPROP WITH MCPA. A mixture of translocated herbicides for post-emergence use in cereals to control a range of broad-leaved annual and perennial weeds. Potassium and Sodium Salt Formulations: Seritox (May & Baker, Ltd.).

Dinoseb, amine Salt Formulations:
Dinoseb amine M & B (May & Baker,

Maleic hydrazide. A herbicide for retarding the growth of grass on farm roadside verges. Liquid formulations: Regulox (Baywood Chemicals, Ltd.).

MECOPROP WITH 2,4-D. For the control of white clover, plantains, daisy, starweed, creeping buttercup, dandelion and other weeds in cultivated turf. Liquid formulations: New Verdone (Plant Protection, Ltd.).

PROPHAM, WETTABLE POWDERS: Profarma Propham wettable powder (Profarma, Ltd.).

Purchase Tax Cuts

FIRM OF CHEMISTS WRITE TO M.P.

JOHN Park & Son, dispensing chemists, Great Northern Road, Aberdeen, have written to Mr. Hector Hughes, M.P., pointing out the financial losses incurred by retailers who find themselves burdened by purchase tax cuts. Inquiry at the Treasury by Mr. Hughes elicited the explanation from Mr. Edward Du Cann (Economic Secretary) that an independent committee that had reported in 1953 had been unable to suggest any comprehensive solution of the problem. The main conclusion had been that, when rates of tax were reduced, compensation should not be paid at the expense of the Crown to traders holding tax-paid stocks, nor, in the converse case of tax increases, should additional tax be

charged. There was, however, a suggestion that continued use should be permitted of sale-or-return schemes designed to defer payment of purchase tax until chargeable goods were actually sold, or otherwise "appropriated" to a taxable purpose by the retailer.

Shop Workers

PROPOSITIONS FOR ANNUAL MEETING

THE interim agenda for the annual delegate meeting of the Union of Shop, Distributive and Allied Workers, Bournemouth, April 28-30, includes a number of propositions of pharmaceutical interest. One motion calls for Governmental action to ensure that all new drugs are subject to clinical test, and for the formation of a committee to investigate the reliability of clinical trials carried out on a drug before its release for general use; another that the financing of a central testing authority should be by a levy or tax on drug manufacturers. Propositions expressing concern at the increasing use of food additives and the attempts to obtain support for the fluoridation of water supplies have been submitted by Manchester Central Branch. motions call for the nationalisation of the chemical industry. Changes in retail conditions including the introduction of a five-day working week, and three weeks' holiday are proposed. There is concern at the spread of late night shop closing, but a motion that the Shops Act should be amended to make 6 p.m. the latest permitted hour for opening, is tempered by an amendment that would allow chemists to fulfil compulsory rota arrangements, but on the basis of a five-day week.

Travellers' Schools

1962 APPEAL RAISES £45,000

THE sum of £45,000 was raised as the result of the 117th maintenance appeal on behalf of the Royal Commercial Travellers' Schools. At the annual festival dinner held in London on April 5, the appeal president (Mr. J. F. T. Langley) thanked industry, the United Commercial Travellers and other Associations for their help in achieving that amount. Mr. Alan Green (Minister of State, Board of Trade), who was the chief guest at the dinner, pointed out that State schools could not cater so well for the particular needs of the children as did the R.C.T.S. Mr. Cyril Harvey (chairman, board of management) mentioned that there were 150 orphaned children at the schools and another forty or so who either had no mother or the mother was incapacitated.

Exhibition in Australia

TRADE DRIVE PLANS FOR 1964

THE British Exhibition, Australia — to be held in Sydney, September 25 to October 10, 1964, will be the biggest staged overseas by British industry. Announcing plans for the exhibition in London, Mr. F. J. Erroll (President of the Board of Trade) told a Press conference that the object was to present the picture of a "modern, progressive Britain." Mr. Erroll said that Britain had been criticised for taking Australia too much for granted. He added: "We

have been thinking for some time what best we can do to put that criticism right." The exhibition will be preceded by a number of British "weeks" in various State capitals, culminating in a British "fortnight" in Sydney to coincide with the exhibition. Sir Norman Kipping (director-general, Federation of British Industries), said that already 300 U.K. companies or their subsidiaries in Australia had said they wanted to take part in the exhibition.

Lithium Imports

NO ANTI-DUMPING DUTIES

THE Board of Trade said on March 6 that it was taking no further action on an application made in 1962 for the imposition of anti-dumping duties on lithium hydroxide and lithium carbonate. The Board is satisfied that imports of those products from the United States and West Germany, and the import of lithium carbonate from the Federation of Rhodesia and Nyasaland, had been dumped, and that the dumping had caused material injury to the British lithium industry. The United States, German and Rhodesian concerns currently exporting those products to Britain had, however, now increased their prices to eliminate dumping.

Micro-inorganic Anaylsis

A COURSE OF STUDIES IN LONDON

A COURSE of eight lectures and practical work on micro-inorganic analysis is being held at Norwood Technical College, Knights Hill, West Norwood, London, S.E.27, on Saturday mornings, commencing April 27. The course, which is described as "suitable for industrial and research chemists wishing to introduce modern micro-analytical techniques," is the second part of a general course on micro-chemical methods. Syllabus and application forms are obtainable from the College secretary.

Sterile Fluids

OPEN MEETING AT HOSPITALS EXHIBITION

AS their contribution to the programme of conferences and lectures being organised to coincide with International Hospital Equipment and Medical Services Exhibition at Olympia, London, May 27-31, the Guild of Public Pharmacists has arranged an open meeting on "The Organisation and Planning of a Sterile Fluids Department." Speaker at the meeting, which is on May 29, will be Mr. N. W. Blacow (group chief pharmacist, United Leeds Hospitals).

IRISH BREVITIES

THE NORTH

PRESCRIPTIONS dispensed in Northern Ireland during December 1962, numbered 555,835 (391,810 forms). Total cost was £294,096 (£237,997 net), an average of 126.99d. per prescription (102.76d. net). In the period January 1962 to December 1962, 6,741,993 prescriptions were dispensed at a total cost of £3,483,346 (£2,799,367 net).

THE REPUBLIC

MR. L. Manley, M.P.S.I., has been elected vice-chairman of the O'Dwyer Gaelic Football Club, Balbriggan.

NEWS IN BRIEF

A SALES increase of 12 per cent. over the previous year was reported at the recent annual meeting of National Co-operative Chemists, Ltd. The Society operates eighty-four branches.

THE Hydrocarbon Oil Duties (Drawback) (No. 1) Order, 1963, effective since April 1, reduces the rates used for determining the quantities of hydrocarbon oil in respect of which drawback is allowed in relation to rubber hydrochloride packing film and vitamin D₃.

THE shop front of the pharmacy of Yates Bros. Chemists, Ltd., 195 Chorley Road, Swinton, Lancs, was recently wrecked by a bus. The accident followed a fortnight after a gas explosion at the shop and three weeks after thieves robbed the till.

PORTSMOUTH Executive Council has decided, subject to the consent of the Minister of Health, that there will be no late Saturday evening dispensing service in future in their area. The local Pharmaceutical Committee state that there is ample coverage by the emergency pharmaceutical service.

An item on "Pharmacy as a Career" is being included in the Scottish Television magazine programme "Round-up" on April 16. Dr. F. Fish (school of pharmacy, Royal College of Science and Technology, Glasgow) is taking part, accompanied by a student and a recently qualified pharmacist.

A REPORT that amphetamine containing inhalers, manufactured by Parkinsons, Ltd., Burnley, Lancs, were on sale to the public appeared in the News of the World, March 31. The paper stated that the Pharmaceutical Society was investigating the report, which alleged that the company "deals mainly through corner-shop grocers."

Percentage changes in pharmacy sales of 160 representative Co-operative societies in Britain for the four weeks ended January 26, compared with those of a similar period a year earlier, were: Midland, minus 4·22; Northern, plus 4·4; North-east, plus 0·15; North-west, plus 5·61; Scottish, plus 2·56; Southern, plus 1·41; Southwest, plus 5·37; Western, minus 3·56; Great Britain, plus 1·1.

SPORT

Golf.—South London and Surrey Pharmacists' Golfing Society. Forty members played in a Stableford competition at Croham Hurst golf club, on March 27, Results: Scotia Bowl (open), 1, H. P. Southcott (Royal Blackheath), 38 points (best score on last nine holes); 2, C. J. Martin (Ifield), 38 points; 3, S. M. Hutchinson (Royal Blackheath), 35 points, Best score on first nine holes, R. E. Hcdges (Langley Park); Best score on last nine holes, G. G. Jamicson (Croham Hurst), George Watt Tankard (eighteen and over prize), J. Cuthbert (Shortlands), 35 points, At the annual meeting, the following officers were elected:—President, R. Swindells; Captain, C. J. Martin; Treasurer, S. M. Hutchinson; Vice-captain and Secretary, G. Philp, 149 Wickham Way, Park Langley, Beckenham, Kent,

LOCAL OFFICERS

Bishop's Stortford Retail Pharmacists' Association (newly formed), — Chairman R. Howe; Treasurer, C. L. Jones; Secretary, A. McKenzie, 14 North Street, Bishop's Stortford, Herts,

TOPICAL REFLECTIONS

By Xrayser

Income

The area meeting of the National Pharmaceutical Union, reported on pp. 360-61, was, as you state, rather less than the "injection of pep" which had been forecast. Indeed, to continue the metaphor, one might almost describe the injection as a sterile one. There were, however, several items of interest from both the platform and the floor which stimulate thought. For example, the secretary of the Union (Mr. J. Wright) expressed concern over efforts by two suppliers to sell antibiotics at cheap prices, since the widespread use of material from those suppliers might cause a cut in the price allowed to contractors, thus bringing down in its turn both oncost and remuneration. There is little doubt that Mr. Wright's reading of the situation is correct, for oncost is now clearly regarded as trading profit and, as such, part of remuneration. Implicit in Mr. Wright's statement is the fact that, under the present system of payment the contractor has a vested interest in keeping the cost of drugs as high as possible, since a good part of his remuneration (or income) derives from oncost. Substance is given to that statement in the resolution moved by Mr. J. I. James, Swansea, to the effect that the N.P.U. Executive Committee should urgently seek the co-operation of members of the Association of the British Pharmaceutical Industry in discontinuing discounts for larger parcels of "ethical" preparations. In support of the resolution, Mr. James said that, so long as part of the pharmacist's remuneration was made up of oncost, the Minister must seek the lowest basic price. Whether or not contractors are able to influence the cost prices of ingredients, it is perfectly true that the higher the costs are, the better off will the contractor be, and the lower they are, the less well off he will become. And, so long as costs continue to rise, reacting to one factor or another, so long will the Minister seek ways of keeping prices to the minimum, as he is bound to do. We appear doomed to perpetual wrangle and rancour.

Rising costs

Ingredient cost has been steadily rising, and the fact that such costs have increased from 2s. 8d. in 1955 to 6s. 2d. in 1962, as Mr. Wright told the meeting, only serves to underline how insecure the contractor's financial foundation really is. It so happens that the cost per prescription has increased. It might have decreased and, under constant ministerial pressure, it could yet do so in the future. It also happens that the introduction of a levy, increased on two subsequent occasions, resulted in the prescribing of larger quantities, with consequent increase in ingredient cost, but that factor has to be read in conjunction with the decreased number of prescriptions and the reduced number of dispensing fees. A side issue, not without its importance, is that the figures of ingredient cost quoted are average for the country as a whole, taking no account of the effect on individual contractors of the prescribing habits of their own area, where the surgery opposite may be tenanted by Ebenezer Scrooge, M.D., or the Cheeryble brothers—not that I am naive enough to suggest that efficacy of treatment is related to cost in the same manner as is contractors' remuneration. The battle of costs goes on unabated. Further illustration of that is to be seen on p. 357, where an announcement is made that the Drug Tariff (Scotland) has been amended to take account of trade discounts allowed on the list prices of proprietary preparations. That cut is additional to the oncost sliding scale introduced recently.

Dispensing fees

Meanwhile, financial recognition of the professional services of the pharmacist continues to be totally unrealistic and inadequate, bearing no relation whatever to the responsibility or to the long and arduous training. Oncost originally—I speak of many years ago—was intended to cover the handling of the materials, and it accounted for as little as 25s. on 100 prescriptions. Today, the professional fee has been obscured by the important place taken by oncost as a material factor in remuneration. The whole situation seems to be in need of examination and a fresh approach.

"Safety of Drugs" Report

TWO PHARMACIST MEMBERS "DISSENT" FROM RECOMMENDATIONS

GOVERNMENT - APPOINTED Committee on the Safety of Drugs, with salaried experts and a secretariat, is being set up following the final report of the joint subcommittee on safety of drugs published on April 4 (H.M. Stationery Office, price 1s. 3d.). The subcommittee, which was under the chairmanship of Lord Cohen of Birkenhead, was set up in August 1962 (C. & D., July 28, p. 79). It comprised eight members, two of whom (Mr. John Grosset and Sir Hugh Linstead), both pharmacists, do not agree with their colleagues recommendation that a voluntary scheme of drug investigation would meet present needs. In a "note of dissent" they state that they believe any sent" they state that they believe any voluntary system "must have so many loopholes that it can offer no real additional safeguards to the public." consider there is no satisfactory alternative to early legislation.'

Independent of Industry

The new Committee will be appointed by the Health Ministers after consultation with the Royal Colleges, General Medical Council, Medical Research Council, British Medical Association and Pharmaceutical Society of Great Britain. It will be independent of in-dustry, for the Cohen Committee (actually the Standing Medical Advisory Committees for England and Wales and Scotland, to which the subcommittee reported) does not think that direct representation of industry on the committees would "necessarily be in its own interest." The report states that, since tendering its interim advice (C. & D., November 10, 1962, p. 509), the Committee had received memoranda and met representatives from the A.B.P.I., B.M.A., Pharmaceutical Society of Great Britain and College of General Practitioners. Although, the Although, the report states, the Committee believe that any arrangements for drug testing would be more effective with legislative sanction, and that legislation on the whole subject is urgently required, it points out that legislation would involve a comprehensive review of the whole field—a major undertaking. "No interim measures should be regarded as a justification for delaying that essential task." The immediate need is to take The immediate need is to take any steps currently possible to improve the safety testing of drugs. The report recognises that, in the absence of legislation, its scheme would be effective only to the extent that the industry and the medical profession were prepared to co-operate in implementing it. The Committee reiterates its view that the pharmaceutical industry as a whole has effectively discharged its responsibilities for the experimental lab-oratory testing of new drugs within the limits of existing knowledge of testing methods. Public and professional opinion, however, demand some type of methods. formal machinery, independent of that of the manufacturer, for assessing the safety of a drug, though an elaborate or large-scale system of control is not thought warranted.

The Committee considered the proposal by the A.B.P.I. for an advisory centre on drug safety under a trust independent of Government and of in-dustry (see C. & D., January 26, p. 82), and noted the A.B.P.I. objection to linking the centre with the Health Minon the grounds that it might become entangled in political issues. The Association's proposal is considered to have a number of important defects. Public opinion is thought unlikely to be content with anything short of Ministerial responsibility for verifying that adequate precautions, in the light of current medical and scientific knowledge, have been taken to secure the safety of drugs, and the proposal that the industry should give financial sup-port, even if subject to a Trust Deed, would detract from the value of the centre, which "must be clearly seen to be independent of industry." Nor is it by any means certain that the proposal would command the co-operation of all non-member manufacturers, importers and foreign manufacturers. "High standards of leading firms are not necessarily reproduced throughout the industry.

The view that the Health Ministers should not appoint the committee on safety of drugs had been supported by the B.M.A. on the grounds that their National Health Service responsibilities would arouse suspicion that their actions might be coloured by political motives and by considerations of economy. On that point the Committee considers that the wider responsibility of the Health Ministers is clearly distinguishable from their responsibility to provide a National Health Service. Principal function of the Committee on the Safety of Drugs will be to satisfy itself, "through the medium of a main subcommittee on toxicity, on the basis of protocols and other evidence submitted by or on behalf of the manufacturers, that before a drug was submitted for clinical trials it had been subject to adequate toxicity testing, and to advise the manufacturers accordingly. latter would no doubt have recourse to advice and guidance which may be made available from time to time by the expert committees set up by the M.R.C. and the A.B.P.I. or from other sources. It would be open to the Committee to decide whether, exceptionally, and subject to conditions, individual drugs or groups of drugs might safely be submitted to clinical trials before the completion of toxicity testing."

Clinical Trials

There is held to be no advantage in establishing a formal register of persons able and willing to undertake clinical trials, but it is recommended that, to limit the hazards, initial clinical trials of new drugs should be confined to one or two centres. Where two or more centres are involved the names of the investigators should be known by any participant, so that helpful communication can, if necessary, be established. The wide distribution of drugs for clinical trial is not to be encouraged.

The responsibility for arranging clinical trials should, says the report, lie with the manufacturer. There should be an independent objective assessment by a second subcommittee, which would have regard to evidence submitted by the manufacturer and by the consultant concerned. If any toxic reactions occur during the clinical trial they should be notified immediately to the main Committee. The function of the parent committee at that stage should be to determine the adequacy of the clinical trials and the safety of the drug in relation to the conditions for which it was intended to be used. The Committee might then decide that the drug could be safely released for general use, or it might decide that longer trial under controlled conditions (for example in hospitals or on special prescriptions) should be continued before the drug is released for general use. Such procedures for the assessment of toxicity testing and clinical trials need not impose any substantial or unnecessary delays.

The voluntary scheme would have no formal legal sanctions but the majority of the Committee are of the opinion that the following measures might help to ensure that new drugs were subjected to adequate toxicity testing and clinical

trials:-

(i) It should be accepted practice that no doctor should agree to undertake a clinical trial of a drug without an assurance that full data on its toxicity tests had been seen and approved by the Committee on Safety of Drugs.

(ii) If a manufacturer decided contrary to the Committee's advice to release for general use a drug that had passed the stage of clinical trial, the facts should be brought immediately to the attention of all prescribers.

(iii) Similarly, if it came to the notice of the Committee that a manufacturer had marketed a drug without giving the Committee an opportunity to assess the adequacy of any toxicity tests or clinical trials that might have been carried out, all prescribers should be informed of the facts.

To avoid legal actions, the Committee should advise the Health Ministers whenever such instances occurred, so that the Ministers might take whatever action they thought fit to bring the facts to the notice of the profession.

Central Registry of Adverse Reactions

The proposed Committee and a third subcommittee should determine the machinery for submitting and reporting data about suspected side effects of drugs. The family doctor had clearly an important part to play in collecting such information, and hospital specialists might be invited to watch for and report any side effects.

port any side effects.

The Committee believes that the pharmaceutical industry would wish to play a full part in the provision of such a service. "Individual manufacturers would be prepared, no doubt, to provide the subcommittee with full information about adverse effects of their

products. In return they would expect access to information about their products passed to the subcommittee from other sources."

Such evidence as was available did not suggest that the Committee was likely to be overwhelmed with reports

of adverse reactions.

It should be the responsibility of the Health Ministers to arrange for the dissemination of information about adverse reactions, and that some formal machinery should be established to ensure that that was done at regular intervals. The Committee recommends that all new drugs and preparations should be submitted to the Committee on Safety of Drugs. "Of these, which may number 300 or more a year, only 30-40 will be 'new' in the sense of drugs of new chemical structure or novel therapeutic action. Only for these latter is it likely that the full machinery of the Committee will need to be brought into play, but it is, in our view, essential that the degree of testing necessary for all preparations should be determined by the Committee.'

"Dissenting" Statement

In their "note of dissent," Mr. J. Grosset and Sir Hugh Linstead regret that they are not able to agree with the advice offered to the Minister except upon the formation of a Central Regis-

try of Adverse Reactions.

They describe the deficiencies of a voluntary scheme and point out that such a scheme depends upon the cooperation of the whole of the pharmaceutical industry. It is not certain that that will be secured. "In particular, it will not be enough for the leading firms to give it their support if smaller firms with inadequate research and testing

facilities fail to do so."

The sanctions that can be applied in any voluntary scheme are few and weak. Members of the A.B.P.I. can be subjected to domestic disciplinary control, but that is not effective for non-members, and exclusion from the Association is no barrier against continuing in business. Notification to the medical profession by the Minister of Health that a particular drug has not been approved will have some effect, but the manufac-turer can counteract it by propaganda if he feels that the withholding of approval is unjustified. Firms can justify non-co-operation on the ground that their products have been adequately tested abroad and are registered there. If, by that sort of justification, they can secure six months' lead over their more scrupulous rivals, they will be strongly tempted to do so, and such conduct will soon erode the scheme. A voluntary scheme therefore offers more than it can perform and may give the appearance of safety without the reality

The two pharmacists say that they know of no other countries comparable in their scientific and industrial development that have not found it necessary

to control drugs by statute.

In addition to the positive defects of a voluntary scheme it suffers from the omission of many features essential to the proper control of drugs. For example:—

(a) It is almost certainly desirable that all new drugs should be restricted to medical prescription at least until their

safety has been proved beyond question.

(b) There are some drugs (not necessarily poisons in the legal sense of the term) that the public should at no time be able to obtain except on production of a medical prescription.

(c) It is important that, whoever markets it, a drug shall always be called by the same name, preferably an internationally or nationally approved name, even when a trade marked name is also used.

(d) There are labelling requirements which ought to be imposed for the proper protection of the public, for example, a date after which a drug should not be used or a warning about possible dangers.

(e) Under a voluntary scheme a drug may be approved for one therapeutic purpose and later recommended by the makers for another. No voluntary scheme can control the therapeutic advice given to the medical profession about a new drug.

(f) There is no machinery for the continued oversight of drugs after they have been approved. For quite valid reasons their formulation may be changed or they may be combined with new ingredients.

(g) Except in the case of "therapeutic substances" and "dangerous drugs" there is no control over manufacture.

(h) There are defects in the present statutory provisions for ensuring that drugs are adequately packed by manufacturers so as to guard against deterioration.

At present a series of bodies have varying authority, voluntary and statutory, over medicines, to justify the creation, even temporarily, of another body, required convincing proof that the members of the public would thereby receive protection which would otherwise not be afforded to them. A case has not been made out for a body

lacking statutory powers.

"What is needed is the creation by statute of a body of experts with the responsibility for advising the Health Ministers upon the control needed in the public interest over the whole field of medicines. This body would assume many of the diverse responsibilities indicated above. One of its functions would clearly be the supervision of toxicity testing and clinical trials and for this purpose it could set up a group of committees such as our colleagues propose. These committees would then be statutory bodies and not voluntary, they would be keyed in to the larger structure and there would be teeth in their decisions.

The present legislation regulating the manufacture and distribution of medicines had recently been reviewed by a departmental working party of the Ministry of Health. If a further inquiry is needed before legislation can be prepared, it should be put on foot now. "It may be said that this involves delay and that a voluntary scheme, with all its defects, is preferable because it can be started quickly. If a voluntary scheme could furnish substantially better safeguards than exist at present, there would be force in this argument. We do not believe, however, that within the field of toxicity testing and clinical trials a voluntary scheme is likely to add appreciably to the safeguards provided, and to be provided, by the industry aided by the advice of the Medical Research Council's Committee and the Central Registry of Adverse Effects. We see no danger in a temporary delay while a statutory scheme is evolved and the necessary legislation passed. Once this has been done, but not before, it will be possible to assure the public of full protection against toxicity and other dangers from drugs. We think it is more important to do the job thoroughly than to take refuge in what, at its best, can only be an expedient."

Association's View

Commenting on the Minister's announcement on the safety testing of drugs, Dr. Denis Wheeler (president of the Association of the British Pharmaceutical Industry) said: "We feel that the proposals should do much to reassure the public and our members have given a voluntary undertaking to submit their products to the proposed procedures. We believe that the practice and standards of drug testing used here compare favourably those anywhere else in the with world. The industry established its own expert committee on toxicity in August last year in a further effort to pool its scientific experience on testing. The Association will continue with this and will co-operate with other bodies similarly concerned in improving methods. The testing of a new drug by the manufacturer before it is made available frequently extends to five years and represents a major part of the total research effort. The 'Central Register of Adverse Reactions' or 'early warning system' now to be set up to detect unforcement efforts of druggers. up to detect unforeseen effects of drugs in normal clinical use is a desirable step. The need for new machinery for this purpose has been urged by our Association. Taken as a whole, we believe that these proposals can be implemented so as to be both practical and useful, and they have the great merit that they can be put into operation quickly. It is in this spirit that we have given assurances of the cooperation of the industry.'

The Society's View

The Pharmaceutical Society of Great Britain at a Press Conference on April 8, disagreed with the views expressed in the majority report of the subcommittee and urged immediate action by the Government on the lines of the minority report. The views of the Society could be summarised as follows:—

1. There should be one comprehensive statute which will deal with all medicines;

2. The Health Ministries should accept responsibility for the conditions in which medicines are supplied to the public;

3. The Government should set up an expert and independent body to advise Ministers upon the controls needed over all medicines;

4. The question is urgent because of the increasing risks produced by the number and nature of new drugs.

LEGAL REPORTS

Absolutely Vile

WHEN he appeared at Old Street, London, magistrates' court on a remand charge on March 26 (see C. & D., March 30, p. 329), Carmelo Brincat, Islington, London, N.1, was fined £5 after having pleaded guilty to possessing ninety Drinamyl tablets, suspected stolen or unlawfully obtained. A police officer said that extensive inquiries had been made to trace the source of the tablets found on Brincat, but without success. Brincat had given some assistance to the police. Replying to the magistrate, the detective said he understood that Brincat had been taking the tablets, but there was no reason to suppose he was "a pedlar or marketer." The magistrate said to Brincat: "I want you to understand that this court does take a grave view of people who go round with these things because they can cause innocent people to get seriously hurt and they are absolutely vile taken outside the stated dose-if there is any excuse even for taking them in these doses.'

A Ready Sale

A YOUTH who broke into a chemist's shop to steal drugs told Wirral magistrates at Bromborough, Ches, on March 18 that, though the monetary value to the chemist was small, there was a ready sale for them in the public houses around Conway Street, Birkenhead. Michael Victor Antoneuk and Derek George Dunbar, both of Bebington, pleaded guilty to breaking into the pharmacy of Mr. John Norman

Hulse, M.P.S., 3 The Crescent, Bebington, and stealing drugs, cameras and other goods, valued £45. Antoneuk's father said his wife had been ill and taking tablets. His son had also taken some, and on the night of the break-in was under their influence. Antoneuk, who had previous convictions for larceny, house-breaking and forgery was committed in custody to Cheshire Ouarter Sessions for sentence, Dunbar, who had told the magistrates about the public-house sales, was put on probation a year ago for offences connected with motor vehicles. The magistrates again placed him on probation for two years, and ordered him to pay £2 10s. compensation.

COMPANY NEWS

Previous year's figures in parentheses

TAYLORS DRUG CO., LTD.—Profit for year ended January 12, £410,018 (£437,041) less U.K. tax £226,900 (£238,211), net profit £183,118 (£198,830).

TAYLORS (CASH CHEMISTS) TRUST, LTD.—Group profit for year ended January 12, £670,560 (£724,345), less U.K. tax £367,700 (£394,493), net profit £302,860 (£329,852).

TAYLORS (CASH CHEMISTS) MIDLAND, LTD.—Profit for year ended January 12, £209,640 (£234,181) less U.K. tax £116,450 (£129,540), net profit £93,190 (£104,641).

EUCRYL, LTD. — A one-for-three scrip issue is proposed by the board. Pretax profit rose by 34 per cent, to £223,681 for 1962. Tax takes £115,204 (£86,312), leaving net profit at £108,477 (£80,043). The total dividend is being

IN PARLIAMENT

By a Member of the Press Gallery, House of Commons

WHEN asked by SIR THOMAS MOORE whether the Joint Subcommittee on Safety of Drugs had yet reported, MR. ENOCH POWELL (Minister of Health), in a written reply on April 4, stated the report was available. It proposed that the Health Ministers should appoint an independent expert Committee on Safety of Drugs which, with the assistance of three sub-committees, would advise, in the light of current medical and scientific knowledge, on the ade-quacy of toxicity tests of a new drug before it was submitted to clinical trial and on the adequacy of clinical trials before it was released for general use, and would arrange for the collection of data about any adverse effects found subsequently. The Ministers accepted the recommendations and were taking steps to put the scheme into effect. "We have received assurances that the co-operation of the pharmaceutical industry and of the medical profession will be forthcoming. The details of the scheme will be worked out in full consultation with the industry, with a view to speed and efficiency of operation." The Government had in hand a review of the law relating to drugs generally, with a view to legislation, but the preparation of legislation on the large and complex subject was bound to take time. The Government considered that action on the safety of drugs should not wait upon such legislation, nor did it agree that a voluntary scheme, on the

lines recommended by the majority of the Subcommittee, would be ineffective.

The Drug Bill

MR, L. PAVITT asked the Minister of Health what further action he proposed to reduce the National Health Service drug bill, in the light of the report on the Civil Appropriation Accounts which showed that 64 per cent. of prescriptions were for proprietary drugs, MR. ENOCH POWELL, in a written reply on April 8 stated that action on present lines to eliminate unnecessary expenditure would be continued vigorously.

Dangerous Drugs

MR. N. PANNELL asked the Secretary of State for the Home Department on April 1 how many convictions there had been for being in possession of dangerous drugs since July 1, 1962; how many of those convicted were Commonwealth immigrants; and how many such immigrants could not be recommended for deportation because they had been resident in the United Kingdom for five years or more. MR. H. BROOKE (Home Secretary) said that the number of convictions was 416. Of those convicted, 272 originated from the Commonwealth, and of those he estimated that nearly half had been resident in the United Kingdom for five years or more.

held at 15 per cent, for the third consecutive year with a final of 10 per cent, as before.

ERBA CARLO SOC. P.Az., Milan.—The company is paying a gross dividend for 1962 of 170 lire (equal to 144.50lr. net, after deducting withholding coupon tax), plus 30lr. (coupontax free) on the 3,500,000 ordinary shares. For 1961 a net 170 lire was paid. Net profit rose to 800 million lire from 662 millions.

SANITAS TRUST, LTD.—The company announces that its main operating subsidiary, Sanitas Co., Ltd., has acquired the goodwill, patents, trade marks and "certain assets" of the Horton Manufacturing Co., Ltd., Rickmansworth, Herts, manufacturers and distributors of liquid soaps, disinfectants and allied products. The company will continue to trade under the same name.

SMITH AND NEPHEW ASSOCIATED COMPANIES, LTD.—Dividend is raised from the equivalent of 10·31 per cent. to 12½ per cent. for the year ended December 29, 1962, with a final of 8½ per cent. Group profit increased from £2,694,018 to £3,006,938, and the net profit from £1,306,319 to £1,528,015 after tax of £1,477,418 (£1,396,478). The tax charge was arrived at after crediting £40,936 (£16,145) provision no longer required.

FARBENFABRIKEN BAYER, A.G., Leverkusen, Germany.—The company has announced that Bayer Foreign Investments, Ltd., Toronto (Bayforin) has now acquired nearly 100 per cent. of the capital of Distri SA, Paris, in which it previously held about 40 per cent. The name of the company has now been changed into Bayer France, SA. Its capital amounts to NF934,000. Bayer France SA looks after the Bayer interests in the fields of fibres and paints. Different companies represent the interests in France of other Bayer products; Laboratoires Pharmaceutiques Bayer SA looks after pharmaceuticals.

TIMOTHY WHITES & TAYLORS, LTD.—Ordinary dividend has been increased by 1 per cent. to $18\frac{1}{2}$ per cent. with a final of $12\frac{1}{2}$ per cent. for the year ended January 12. Group trading profits rose from £2,536,467 to £2,672,365 and the net profit from £876,670 to £940,503. The net balance is arrived at after a depreciation provision of £303,394 (£292,946) and tax of £1,184,000 (£1,131,986). A surplus of £219,632 (£83,112) on sales of properties, less the premium of £15,616 (£378) on shares acquired in subsidiaries, has increased capital reserves by £204,016 (£82,734). A transfer of £44,684 (£30,192) has been made from development reserve in connection with goodwill payments and related costs incurred during the year for expansion of busi-

GLAXO GROUP, LTD. — Interim dividend is increased from the equivalent of 6 per cent, to $6\frac{1}{2}$ per cent, in respect of the year ending June 30. The interim is being paid on capital increased to £15.35 millions by a 25 per cent, scrip issue and by the acquisition of Edinburgh Pharmaceutical Industries, Ltd., and the New Apothecaries Co., Ltd. In the half-year ended December 31, 1962, last group trading profits

amounted to £3,625,000 (£3,072,000 in the second half of 1961). There is £1,586,000 (£1,504,000) attributable to the holding company. Owing to the group's world wide trading activities, the figures may be subject to adjustments that can only be made in the annual accounts. Results of Edinburgh Pharmaceutical and the Apothecaries Co. acquired as at the end of last December, and last month respectively, are not included. Compared with the first six months of the last financial year, group sales are up by 7 per cent. in value, and profits, before tax, by 16 per cent. Tax has been estimated upon the basis of known tax in this and other countries in which the group operates. Proposals at present before the Indian Parliament for the introduction of a super-profits tax may significantly increase the group's tax charge during the current year. Because, however, it is not yet known what its precise effect will be, an arbitrary provision has been made at this stage in respect of the proposed tax

BUSINESS CHANGES

THE British-Swiss Chamber of Commerce has transferred its head office to 1 St. Peterstrasse, Zurich, 1.

MR. T. G. CLARKE, M.P.S., opened a pharmacy at 4 Main Street, Market Bosworth, nr. Nuneaton, Warwicks, on April 5.

SHOP AND STORE PLANNERS, LTD., have removed to Myddleton Hall, Almeida Street, London, N.1 (telephone: Canonbury 6658).

THE BRITISH DRUG HOUSES, LTD., announce that their subsidiary companies, Knights of Birmingham and Woolley & Arnfield of Stockport, Manchester and Preston, are now renamed and in future will be known as: B.D.H. (Knights), Ltd., trading from Church Road, Perry Barr, Birmingham, 22s and B.D.H. (Woolley & Arnfield), Ltd., with head office at Brinksway Road, Stockport, and branches also at Preston and Manchester.

Appointments

MARCHON PRODUCTS, LTD., Whitehaven, Cumberland, have appointed Mr. J. A. MacMenemey their deputy home sales manager.

DALES PHARMACEUTICALS, LTD., Power Road, London, W.4, have appointed Mr. S. J. Tucker their representative for North and West London.

WM. R. WARNER & CO., LTD., Eastleigh, Hants, have appointed Mr. E. A. Cooper marketing manager of their Richard Hudnut, toiletries division, and of the Lambert Chemical Co., Ltd.

H. & T. KIRBY & CO., LTD., Belton Road, London, N.W.2, have appointed Mr. H. S. Corbett their representative in Northern Ireland and the Isle of Man; Mr. J. S. Bentley representative in Durham and Yorkshire and Mr. J. Somerville representative in Westmorland, Lancashire and Cheshire.

ASPRO-NICHOLAS GROUP state that Mr. A. J. Whelan (at present home sales manager of British Schering, Ltd.) is taking up an appointment

as international marketing consultant for both British Schering, Ltd., and Nicholas Laboratories, Ltd. Mr. R. F. Bourne (home sales manager, Nicholas Laboratories, Ltd., for the past year), adds to his responsibilities the function of home sales manager, British Schering, Ltd.

PERSONALITIES

MR. J. MALCOLM DAVIES, who is principal lecturer at the Welsh School

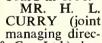
of Pharmacy, is to retire in July. He has taught pharmacognosy in the school since 1926. To mark his retirement, a fund is being organised by the past students of the school and a presentation will be made to Mr. Davies at a dinner to be held in Cardiff on



June 29. Donations to the retirement fund and applications for tickets to the dinner (£1 1s. 0d. each) should be addressed to Mr. M. Barnett, c/o The Welsh School of Pharmacy, Cathays Park, Cardiff.

MR. J. C. YOUNG, who has been in charge of the hair goods division of

Laughton & Sons, Ltd., Birmingham, for many years, retired on March 29. Mr. Young commenced work with the company in November 1916 as a departmental manager. He was appointed to the main board in 1958.





Mr. J. C. Young.

tor, Cuxson, Gerrard & Co., Ltd.), has relinquished full-time activitics because of ill health. Mr. Curry, who joined the company thirty-six years ago will continue to serve as consultant. At a ceremony at head office on April 1 several presentations were made to him on behalf of the directors and employees.

MR. D. V. SMITH, M.P.S., who is secretary of the Pharmaceutical Committee for the County of London, has been appointed a member of the Wandsworth Group Hospital Management Committee for the period April 1-March 31, 1966. Mr. Smith is also a representative of the Pharmaceutical Committee on the London Executive Council for that period.

MR. A. G. M. MADGE, M.P.S., has recently returned from a study of pharmacy in Germany and Belgium. Mr. Madge, who is secretary of Plymouth Branch of the Pharmaceutical Society, has made a special study in recent years of pharmaceutical conditions in the European Common Market countries.

MR. J. P. CURRIE, M.D., F.R.F.P.S.G., M.R.C.P., who has been appointed a director of Glaxo Research, Ltd. (C. & D., April 6, p. 364), was consultant physician to the Glasgow Royal Infirmary and lecturer in materia medica and therapeutics at its medical school. He has made many contributions, laboratory and clinical, to the subject of the action of drugs, particularly in the field of anti-rheumatic drugs and steroids.

DEATHS

ATKINSON. — On March 20, Mr. Clarence Atkinson, M.P.S., 20 The Grangeway, Grange Park, London, N.21. Mr. Atkinson qualified in 1921.

EARLE.—Recently, Mr. Daniel H. Earle, M.Sc., Dublin, aged sixty-three. Mr. Earle had been Eire State Chemist since 1961. He was a native of Dublin and took his degree in the University College, Dublin, He joined the Irish State Laboratory in 1927.

HOSSACK.—On April 2, Mr. Archibald Campbell Hossack, M.P.S., Parklands, Abbey Road, Coupar Angus, Perths. Mr. Hossack qualified in 1913.

JONES. — On April 3, Mr. Eric Evan Jones, M.P.S., Longdendale, Swiss Valley, Llanelly, Carmarthens, principal of Evan Jones (Chemists), Ltd., Cowell Street, Llanelly, Carmarthens. Mr. Jones qualified in 1925.

MOFFATT.—On March 30, Mr. Irving Paul Moffatt, M.P.S., 12 The Avenue, Branksome Park, Poole, Dorset (formerly of Cornwall). Mr. Moffatt qualified in 1904.

REIDY.—Recently, Mr. John Reidy, M.P.S.I., The Spa, Tralee, co. Kerry, Eire. He was one of the oldest pharmacists in the Republic, qualifying in 1907. For many years he had a pharmacy in Cahirciveen, and later transferred to the Mart, Tralee, where he continued until his retirement some years ago. As a young man he was prominently identified with local national movements. Mr. Con Cremen (a former president of the Council of the Pharmaceutical Society of Ireland, and a present mcmber of the Council) served his apprenticeship with Mr. Reidy in his pharmacy at Cahirciveen.

SAMPSON.—Recently, Mr. John William Sampson, Kirton, Boston, Lincs. Mr. Sampson qualified as a pharmaceutical chemist in 1900 and was in business as a pharmacist and optician in High Street, Kirton, Boston, Lincs, for over twenty years. His health had been failing for about four years but he continued in practice as an optician until a few months prior to his death. Mr. and Mrs. Sampson moved to Kirton from Bath about forty years ago and for many years Mr. Sampson was actively interested in local affairs, becoming an alderman of Boston rural district council.

TIMMS. — On March 23, Mr. George Edward Timms, M.P.S., 62 Malvern Road, Priory Road, Hull, Yorks. Mr. Timms qualified in 1913.

WALKER.—On March 16, Mr. William Stanley Walker, M.P.S., 3 Brookfield Street, Leigh, Lancs. Mr. Walker qualified in 1921.

TRADE NOTES

Now Gas-packed. Cow & Gate. Ltd., Guildford, Surrey, announce that their Prolac is now gas-packed.

Now Boilable: The manufacturers

of the Marathon one-way nappy, John Beales, Ltd., Peyeril Street, Notting-ham, have changed the fabric used, and the nappy may now be boiled.

Easter Service. — Geigy Pharmaceutical Co., Ltd., Roundthorn Estate, Wythenshawe, Manchester, 23, announce that a skeleton staff will be working at their Wythenshawe and Isleworth depôts on Saturday morning, April 13, to deal with emergency orders.

In Bottle of twenty-five. - Lederle Laboratories division of Cyanamid of Great Britain, Ltd., Bush House, Aldwych, London, W.C.2, announce that, since April 8, Aquamox quinethazone tablets, 50-mgm, has been available in bottle of twenty-five.

Two-in-one Display Box.—Organon Laboratories, Ltd., Crown House, London Road, Morden, Surrey, have produced a display box containing twelve tubes and two jars of their Endocil cream.

Appointed Agents.—Baird & Tatlock (London), Ltd., Chadwell Heath, Essex, have been appointed sole United Kingdom agents for Gebrüder Haake K.G., Siemensstrasse 27, Berlin-Steglitz, West Germany, and will be handling their full range of viscometers and thermostat units.

Dispensary Cabinets.—Macdonald & Son, Ltd., Portland Mill, Ashton-under-Lyne, Lancs, draw attention to their Certor dispensary cabinets, of wrapping and capping materials, which labour in the pharmacy and add to the efficiency of the dispensary." Cabinets of parchment, satchels, screw-caps and carton are available.

Drink Mats with Soft Drinks .-Beecham Foods, Ltd., Great West Road, Brentford, Middlesex, are giving each customer for a bottle of Quosh (any flavour) a free drink mat. The mats have a durable metal finish and cork backing for heat resistance, and

come in six flower designs (all six designs in every case of Quosh).

Local Distributors.—Sidney Margolis, Ltd., Margo House, Hemp Row, London, S.E.17, announce that the Margo's range of toilet preparations is now avaliable in South Wales from Francis Newbery & Sons, Ltd., Taffs Mead Embankment, Cardiff, and in Devon and Cornwall from May, Roberts & Co., Ltd., George Place, Stonehouse, Plymouth.

At Lower Price for a Month.— Robinson & Sons, Ltd., Wheat Bridge Mills, Chesterfield, Derbys, announce a further special offer of their Paddi-pads. Between Monday, April 22 and Saturday, May 25, a triple-pack of Paddipads is being offered to the customer at a saving of fivepence on the normal price. The margin to the chemist is unchanged.

Change of Name. — Tablets of metharbital 100-mgm. manufactured by Abbott Laboratories, Ltd., Queenborough, Kent, are henceforth being supplied under the name metharbital instead of the previous trade mark Gemonil. The product is unchanged in price and specification. Metharbital is a barbiturate used in the treatment of grand mal, petit mal and myoclonic epilepsy.

Product Improvements.—Gibbs-Pepsodent, Ltd., Hesketh House, Portman Square, London, W.1, announce the reformulation of their medicated shampoo Clinic, to improve both its performance and its appearance. Clinic has been repackaged in three sizes, including a sachet in strong foil, and standard and large-sized bottles in new blue cartons. The carton demonstrates the "Clinic treatment," a combination of formula and method of use, both of which are the subject of illustrations, with captions, on the back of the carton. The formula now includes a germicide "never before used in a shampoo," which is claimed to destroy the dandruff bacteria. The method recommended is to use the

shampoo lather twice, leaving the second lather on the hair for 1 minute.

Trade Receptions. — Easipower Appliances, Ltd., 30 High Street, South-ampton, announce a 1963 series of Dreamland trade receptions as follows:

April 22, NORTHAMPTON, Franklin's Gardens hotel:

April 23, CHELTENHAM, Queen's hotel;

April 25, Guildford, William Harvey's restaurant;

April 29, BIRMINGHAM, Grand hotel;

May 1, SHEFFIELD, Grand hotel; May 2, MANCHESTER, Grand hotel;

May 6, CHESTER, The Blossoms hotel;

May 7, NOTTINGHAM, Victoria Station hotel;

May 9, LEEDS, Metropole hotel; May 13, MORECAMBE, Elms hotel;

May 14. Newcastle-upon-Tyne, Royal Station hotel;

May 16, Glasgow, More's hotel; May 20, Aberdeen, Caledonian hotel;

May 23, EDINBURGH, George hotel;

May 27, LIVERPOOL, Exchange hotel;

May 29, Norwich, Norwood Rooms; May 30, Slough, Old Crown hotel;

June 5, COLCHESTER, George hotel;

June 6, CROYDON, Greyhound.

Bonus Offers

Albion Soap Co., Ltd., 30 Thames Street, Hampton-on-Thames, Middlesex. Simple hand cream and dusting powder. Fourteen invoiced as twelve. Until May 31.

CUXSON, GERRARD & Co., LTD., Fountain Lane, Oldbury, Birmingham. Aidex burn and wound cream. One doz. free with order for six doz., plus two per doz. free with order for more than six doz. Until June 30.

NICHOLAS PRODUCTS, LTD., Slough, Bucks. Swan Lake talcum powder, Fields French pink, French moss and French flowers talcum powders. Twelve invoiced as eleven. Until May 24.

ORGANON LABORATORIES, LTD., Crown House, London Road, Morden, Surrey. Endocil cream. 12½ per cent. extra for display.

MAKERS' ACTIVITIES

Sales Conference. — London's new Hilton Hotel was the venue for the most important representatives' conference ever held by Goya, Ltd., 161 New Bond Street, London, W.1. The conference took place on March 22 and was for the launching of a new Goya cosmetic range. Amongst those taking part in the conference were Millicent Martin and Lance Percival, from the B.B.C. television programme "That Was The Week That Was.'

Cruises as Prizes.—In May and June, Richard Hudnut, Ltd., Eastleigh, Hants. are sponsoring a luxury Mediterranean cruise competition open to all users of their Style home perm kits. First prize is two tickets on the s.s. Hermes on a seventeen-day cruise calling at Italy, Greece, Lebanon, Syria and Cyprus, plus £500 spending money. Dealer who sells the kit to the winner receives two tickets on the same cruise, plus £100 spending money, plus all expenses for a temporary manager to run the shop during October while he is away.

INFORMATION WANTED

The Editor would appreciate information about: Ferrol compound Vaposkin

PHOTOGRAPHY IN 1963

Information Council launches national promotion scheme

A NEW national scheme designed to help photographic dealers to make 1963

a boom year has been launched by the Photographic Information Council. 7,000 Over dealers have received tractively desheet presenting ideas "to make the cash-register



ring." Running throughout the scheme is a new national symbol — an animated camera known as "Mr. Pic." The council hopes that the symbol will quickly be recognised by dealers and public alike as representing the fun photography offers to people of all ages and both sexes. For an outlay of £1, dealers are offered a specially

designed portfolio containing full details of a whole scheme of local directmail advertising, including six "model" letters to prospective customers. Once a quantity of letters has been ordered, the £1 paid for the portfolio is automatically refunded. The letters are overprinted with the dealer's own name and address. They are then put into addressed envelopes and returned in bulk to the dealer so that he can pop them into his local post-box. That part of the scheme is being handled by Independent Creative Services, Ltd. Other ideas in the scheme include dealer contact with local newspapers, over 120 of which are already publishing articles on amateur photography supplied weekly by the Council's Press and public-relations consultants (Howard S. Cotton, Ltd.). Any dealers who may have failed to receive details should write to the Photographic Information Council at 46 Bloomsbury Street, London, W.C.1.

NEW PRODUCTS AND PACKS

Methocarbamol with Aspirin. — A. H. Robins Co., Ltd., Foundry Lane, Horsham, Sussex, announce the issue of a new speciality, Robaxisal-Forte tablets. Each pink and white, two-layer laminated tablet contains 400 mgm. of methocarbamol (Robaxin) and 325 mgm. (gr. 5) of acetylsalicylic acid. The packs are bottles of 100 and 500. The product is listed as P.1, S.4B.

Package Redesigned.—Nicholas Products, Ltd., Slough, Bucks, have re-



designed the 25-, 50- and 100-tablet packs of Rennies indigestion remedy. The new packs are described as "brighter, more eye-catching, yet easily identifiable by established users." The colours of white, black, scarlet and fawn are retained, but the packs discontinue the chequerboard background, and the name Rennies is featured prominently on all sides of the carton. The pack of twelve remains available.

Virtually a New Product.—Genatosan, Ltd., Loughborough, Leics, announce that their newly named speciality Cortipix was originally known as Pixcyl H.C. The name was changed to avoid confusion with Pixcyl ointment, which is still available, and to provide a name that is "short, descriptive and easy to remember." An additional pack is being introduced containing a higher percentage of hydrocortisone. Cortipix is thus now available in ½ per cent. and 1 per cent. strengths. The product is a white, non-greasy cream for topical dermatological use as an

anti-inflammatory and anti-pruritic agent.

Personal Weigher.—Claimed the greatest value in personal scales, the new Fleetway Waytline of Fleetway Manufacturing Co., Ltd., Charlton Road, London, N.9, is of pressed-steel construction, plastic covered in midnight grey, golden dawn or summer green. It has a magnified scale. Each is tested before dispatch and issued with a five-year guarantee.

Disposable Syringe Pack.—Pharmethicals (London), Ltd. (a subsidiary of Schering A.G., Berlin, Germany), Victoria Way, Burgess Hill, Sussex, are marketing a disposable syringe/needle pack (Citole) of which an ampoule of Primolut depôt forms the barrel. Primolut depôt, the makers state, "is recognised for its efficiency and safety in the support of pregnancy." The Citole, which is prescribable under the National Health Service, is in 125-mgm. and 250-mgm. sizes.

Liver Function Test Injection. — Lloyd's Research, Ltd., a member of the Lloyd group of companies, Clerk Green, Batley, Yorks, announce the introduction of sulfobromophthalein sodium, U.S.P., injection for liverfunction test. The product, which is available as a 5 per cent. solution for intravenous injection in ampoules of 3 and 10 mils, conforms to the standards laid down in the U.S.P., XVI, and is tested by an independent authority for freedom from pyrogen. The packs are boxes of six and thirtysix 3-mil ampoules and box of six 10-mil ampoules. Supplies may be obtained through the usual trade wholesalers or direct from Howard Lloyd & Co., Ltd., Batley.

A Plastic Plate for Snacks.—J. & C. Nicholson, Ltd., 4 Monro Gardens, Harrow Weald, Middlesex, are making available through chemists a special plastic plate — the Snac-nic — to overcome the problem of "dispensing" snacks and drinks. Supported in one hand like an artist's palette, the plate holds a cup or glass, sandwiches or snacks. Useful for parties and picnics,

it is claimed equally suitable for use in canteens, colleges and hotels, and in home nursing. It is available in blue, yellow, green and off-white.

Lacquer Refill Sachet. — André Philippe, Ltd., 71 Gowan Avenue, London, S.W.6, have brought out two new plastic lacquer refill sachets in outer of 3 doz.

Sun Oil.—Helena Rubinstein, Ltd., 3 Grafton Street, London, W.1, have launched a new cosmetic speciality, "beauty sun oil, claimed to have a moisturising action that prevents "summer-dry" skin, and to contain an ultraviolet screening ingredient for protection from the rays that burn."

Hand Cream and Dusting Powder.

—The Albion Soap Co., Ltd., 30
Thames Street, Hampton-on-Thames,
Middlesex, are marketing two new
specialities, Simple hand cream in jars



of two sizes and Simple dusting powder in puffer pack. Both products have the same characteristics as Messrs. Albion's Simple soap, in that they contain no perfume, no colouring and no fillings. The hand cream (small size) and dusting powder are issued in outer of $1\frac{1}{2}$ doz, and the hand cream (large size) in container of 1 doz.

New Season's Sun-glasses. — Alfred Franks & Bartlett Co., Ltd., 226 Gray's Inn Road, London, W.C.1, have introduced new models in their Bartex range, including sun-glasses with black oblong frames having "subtle overtones" of pearlised colours to match or contrast with the season's impressionist fashion shades. All the Bartex sun-glasses are non-inflammable and light in weight, and for their shatter-proof lenses is claimed a high optical accuracy.

Cologne Spray for Men.—In preparation for the hot summer predicted by some forecasters, Lentheric, Ltd., 17 Old Bond Street, London, W.1, have produced a new Onyx Cologne spray in their men's range. It is understood to be specially suitable for use as a body rub. The spray is not of aerosol type but produced by an attachment that fits on to any of the standard 5-oz. Onyx bottles. When the contents are finished it may be transferred to another bottle. The spray has the same general shape as the normal bottle cap, and has the advantage that it is also suitable for use with Onyx hair dressing.



REDESIGNED CONTAINERS: The main range of Potter & Moore toiletries have been redesigned in readiness for summer advertising. Feature of the new designs is the bold use of bright colours. Illustration shows, left, a new addition to the range: Spring Dawn liquid and cream perfume, frosted Cologne, talcum powder and bath cubes. Centre: New packs for Go deodorants. Spray bottle and perfumed stick are turquoise green, non-perfumed stick sky blue. Right: New counter display "dispenser" for redesigned frosted fragrance solid Colognes, "Dispenser" is in white, gold and dark green, containers have coloured caps (red for Gold Brocade, yellow for Spring Dawn, blue for Blue Heaven and green for Apple Blossom).

student

international

BRANCH EVENTS

home

and

COVENTRY N.P.U.

Motion on N.P.U. Survey

A MEETING of the Coventry Branch of the National Pharmaceutical Union, held at Coventry on March 12, was addressed by MR. E. J. Downing (an executive officer of the N.P.U.), who outlined the views of the N.P.U. Executive on the report of the Committee on the General Practice of Pharmacy. During the evening the following resolution was proposed by MR. J. HIATT, seconded by MR. E. CREEDY and passed by the meeting:—

That this Branch, while appreciating the magnitude of the task involved in collating the information from the current statistical survey of 210 pharmacies, seeks information regarding the early production of the relevant data and an assurance that no action involving the Minister of Health will be taken until contractors have had the opportunity of discussing the results at branch level, prior to the relevant Pharmaceutical Committee representatives' meetings.

BIRMINGHAM

Memorial Presentation at Banquet

A TRUST deed for a prize to be awarded at the Birmingham school of pharmacy, and an inscribed pestle and mortar for use at Branch functions, were accepted by the Birmingham Branch of the Pharmaceutical Society on March 13. The occasion was the annual banquet and ball of the Branch and of the Birmingham Pharmaceutical Association. The presentation was in memory of the late Mr. J. Rushton, who was secretary of both for twenty-seven years. A toast to the Pharmaceutical Society, proposed by Mr. F. Mills, was responded to by Miss M. A. Burr (president of the Society). Other guests included Mr. C. Orrell (chairman, National Pharmaceutical Union) and Mrs. Orrell, Mr. L. D. Smith (president, Proprietary Articles Trade Association), Dr. Millar (medical officer of health) and the lord mayor of Birmingham (Alderman Horton) with Mrs. Horton. About 260 members and friends attended the function, which was under the guidance of Mrs, W. F. Norris (wife of the social secretary) and Mr. F. J. Reynolds (Branch chairman).

HOUNSLOW

Annual Dinner

THOUGH pharmacists dispensed a vast number of prescriptions every year, it was rare to find a criticism of the quality of the medicine or accuracy of its dispensing, said DR. A. ANDERSON (medical officer of health, Heston and Isleworth), in proposing the toast to the Pharmaceutical Society at the second annual dinner and dance of the Hounslow Branch on March 27. Dr. Anderson said that in the course of visits he had made to the research departments of large manufacturing chemists, he had been impressed by the testing and crosschecking that was carried out on drugs before they were marketed. Considerable publicity had been given to the unexpected results of thalidomide, but children had been born deformed long before that drug was thought of and

some good might come out of the tragedy, in that research workers might find the causes of malformation. The public, however, must realise that all drugs could be dangerous if wrongly used. Replying to the toast MR. ALLEN ALDINGTON (a member of Council) said he was glad Dr. Anderson had mentioned the last point because medicines were not "mere merchandise" to be sold by anyone. That was why the Pharmaceutical Society's Council was convinced that all medicines should be sold through pharmacies. The chairman (Dr. E. J. Shellard) proposed the toast to the guests, the mayor (Councillor W. F. Bowhill) responding.

WESTERN [LONDON]

Links with the Conference

MEMBERS of the Society should not MEMBERS of the Society should not rest content until pharmacists were recognised as the authority on all aspects of drugs, said DR. T. D. WHITTET, proposing the toast "The Pharmaceutical Society" at the annual dinner and dance of the Western Pharmacists' Association in London on March 21. Even the youngest had seen great changes in pharmacy. Many might regret the passing of the days of "secundum artem," but all could rejoice that the drugs of today were such as would "do their work." Surely it was better to supply medicines that were specific. Coupling with the toast the name of the Society's president (Miss M. A. Burr), Dr. Whittet said he had watched her confidence and friendliness in conducting meetings and could affirm that she had truly adorned her office. He noted with interest that Miss Burr had once been a Red Cross nurse in Chesterfield, where he had embarked on his own career—and begun his married life. All pharmacists were delighted that Miss Burr had been accorded the hon. M.A. degree of Nottingham University. MISS BURR in her reply, took pride in what had already been achieved by the Society since the Council had approved its higher education policy. She congratulated the Association on encouraging close relations with the students at Chelsea. She had followed the work of pharmacy students in both

organisations and could testify that they were doing much to raise the esteem in which British pharmacy was held. Pharmacists in London at present must be specially "Conference-minded," and she noted that the Western had long been identified with the organisation of the London meetings of the Conference. The toast to the Association was in fact proposed by the 1963 Conference chairman (MR. H. G. ROLFE) who said he understood that it was a tradition for the Conference chairman to do so, and perhaps this year there was the added advantage of giving him some practice in speaking in the actual rooms in which the sessions would be held. Many present might be surprised that until 1922 there had been no chairman. In that year the chief officer of the Conference had been "demoted" from president has been "demoted" from president has been the chief of the Conference had been "demoted" from president has been the chief of the c dent because the Society had taken over the Conference and the Society's president had become president of the Conference. It would also surprise some that the Conference had started as a provincial revolt against the Metropolis. By 1900 the Conference had met only once in London. That was in 1874, and for the special reason "trouble in Ireland"—where it should have been held—over arguments between apothecaries and druggists. The fact that it was the Western that in 1899 had invited the Conference to London showed the Association's high place in London affairs. Since then the help of the Association had been asked and relied upon in many Conference meetings. Responding to the toast, the Association's president (Mr. J. D. SINGER) welcomed by name the Association's official guests, the officers of other London Associations and Branches, and a personal friend, Mr. G. G. Jamieson, who had come south with him from their native Scotland, both to embark on a career in London. Commenting on the large contingent from South-west London. Mr. Singer said the welcome to them had been tinged with apprehension at one point at the possibility of the "take-over bid" mentioned in a published letter of the S.W. president (see C. & D., March 16, p. 282).



MANSFIELD BRANCH DINNER: Group photographed at annual dinner and dance of Mansfield and District Branch, Pharmaceutical Society, on March 20, includes Mrs, and Mr. B. A. Richards (vice-chairman), Mrs. H. Buck, Mr. and Mrs. Preston-Robinson, Dr. H. Buck, Messrs, R. G. Pack (chairman), and B. W. Hill (chairman, Chesterfield Branch), Mrs. R. G. Pack, Mr. L. Webber, Mrs. and Mr. G. P. C. Vallance and Mrs. L. Webber.

[Photo: Vallance, Mansfield

Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

Reimbursing Purchase-tax Losses

SIR,—The Hutton Committee could not find any means of reimbursing retailers when purchase tax is reduced. Here is one method. Each taxable article should have attached a perforated label on the outside of the package, showing the name of the article, the contents or size and the rate of tax charged and the date of issue. When the tax is reduced the retailer could remove the labels, give his name and address on the back and send them to his supplier, with a debit note for the difference in the tax. The supplier could then send them with his debit note to the Treasury.

H. LATTIMER,

Ewell, Surrey

P.S.—I wonder if pharmacists keep a record of their losses on purchase tax and include the item when making their income-tax returns.

An Opportunity Missed

SIR,—What a pity that no one at Hertford's "Any Questions" night (C. & D., March 30, p. 349) was able to counter Lord Balniel's remark: "Surely the sliding scale helps the smaller pharmacist"! He should have been told that it keeps the smaller pharmacist "here." been told that it keeps the smaller pharmacist down and pushes the larger lower, and that none of the scales, even at their best, have provided a sufficient livelihood for anyone depending on dispensing alone. Moreover, he should be informed that, having undertaken the heavy responsibility of N.H.S. dispensing, albeit at cut rates, pharmacists have thus far not been awarded any of the privileges, nor the protection, that the acceptance of such responsibility should merit—privileges and protection which, when granted, would give us the standing of our continental colleagues. We do not meet our M.P.'s face to face so often that we can afford to miss one single opportunity.

J. T. MARRIOTT, Hemel Hempstead, Herts

Overstepping What Mark?

SIR,—I would like to thank Mr. Lonsdale for his reply (C. & D., March 30, p. 331) to my letter (C. & D., March 23, p. 230) on branch authority and activity. He has unwittingly put his finger on the crux of the matter by warning me not to overstep the mark. What mark? The whole object of the experiment which the branch is conducting is to define that very markto find out the degree of authority and service which the branch could and should usefully render to its members. Service and authority go together and have always been present in the branch in some degree. The question is how much. The disease of supporting our own Society is nothing like as malignant as "sit-back-and-do-nothing-but-criticise-itis." If Mr. Lonsdale thinks that there is something immoral about a branch having any stature of its own, then I suggest that he attends the branch annual meeting so that he can oppose me if I should happen to be nominated for re-election as Branch secretary.

J. R. PHILLIPS. Bournemouth

Price of Disunity

SIR,—The grotesque inadequacy of the recently announced pay scale for retail pharmacists (£775 to £1,425 per annum) is turned into sharp relief, in all its horror, by the new rates just published for medical practitioners (£2,765), and dentists (£2,740). Why we continue to accept the intolerable assumption that the highest paid pharmacist (and he is to be managing a London pharmacy with a £1,000 a week turnover) should earn just about half as much as the average dentist, is past all comprehension, unless we have all gone raving mad. Indeed that conclusion becomes more and more inescapable daily as we see the cumula-tive results of the fratricidal struggle between the warring groups of pharmacy. The medical and dental professions are united, and fight shoulder to shoulder in defence of their common interests, while pharmacy as a profession seems to be reduced to the desperate state of those snakes who, driven frantic with hunger, begin to eat their own tails. When someone comes to write an epitaph for this potentially powerful body, it will surely be "Died from self-inflicted wounds."

STANLEY BUBB. Poole, Dorset

A Protest

SIR,—The statement on the J.I.C. agreement issued by the National Pharmaceutical Union is misleading and a mere juggling with words. It states: "The suggestion that the new rates for pharmacists were the result of hard bargaining by the employers' side to reduce the trade-union claim is without foundation." Of course it is, because the unions were made an offer of new rates by the employers. But consider now the correct way to phrase that first sentence, in view of the fact that the offer came from the employers' side. It should now read: The new rates for pharmacists were the result of hard bargaining by the trade union side to increase the employers' offer." This is not without ployers' offer." This is not without foundation. This confirms the "unjustified and irresponsible criticism" in the trade Press, which was by E. C. Tenner, in fact, in the C. & D. He stated "Our Mr. Wright, secretary of the employers' side, does not mention that his side must have been advocating much lower figures than the trade unions." If the unions gained an increase from £850 to £950 as the provincial terminal rate, as has been stated, and not denied by Mr. Wright or Mr. Moss, is E. C. Tenner's argument not true? An increase of 12 per cent, which the N.P.U. dismiss as a

minor exception! I must protest at the N.P.U.'s attitude over this. Nothing can hide from us the fact that they made the offer to the unions, and that the unions negotiated a higher figure. The result, the J.I.C. scale, has been dismissed as unrealistic and unjust by the majority of the profession. So the N.P.U.'s original offer must have been more unrealistic and unjust, and no amount of juggling with words will hide this.

> J. P. KERR. Newcastle-on-Tyne, 6

Speaking Up

SIR,—Since the new Member of Council, in the letter which appeared under the *nom de plume* of "14 per cent. Down," could only refer to Mr. G. Lowther or myself may I take this opportunity of "speaking up." Far from "joining the enemy," I am more convinced than ever of the necessity for unity of purpose within pharmacy, and the fact that all sections of pharmacy are interdependent. I have preached that gospel at nine branch meetings in various parts of the country, and have found overwhelming support for those basic principles. It is now apparent that the National Pharmaceutical Union Executive wish for complete unity within the interested parties negotiating for retail pharmacy, and it is also obvious that it is the views of the Company Chemists' Association and the Co-operative Association and the Co-operative Union that have prevented Pharmaceutical Society representation on the Central N.H.S. (Chemists Contractors) Committee. I am convinced that, at the conference of Pharmaceutical Committee representatives on May 1, this will be one of the major items for discussion. It is vital in the interests of pharmacy that the bodies responsible for preventing unity make their reasons known, and that delegates to the conference leave all members of the Conference Committee in the conference of the conf tractors Committee in no doubt as to the action they wish taken. Some "victims" might have argued that "14 per cent. Down's" letter would have given the impression of greater sincerity and constructive thought if the author had disclosed his identity I do not subscribe to that theory. No doubt he had his reasons, and I believe that even with criticism has its value.

W. M. DARLING, believe that even anonymous destructive

South Shields

Health Service Fees, etc.

The fees paid by the Ministry for dispensing are based on the figure which employers are prepared to take to get the job done. The figure is not their valuation of their own worth. That fact must be obvious. In reply to my only question at one of National Pharmaceutical Union meetings following the cut in oncost and increase in the levy to 2s. per item, the N.P.U. representative stated

that, in order to claim a dispensing fee of 2s., the value of a pharmacist was estimated at about £1,100 per annum. As the fee is 1s. 5d., it is reasonable to assume that our services are worth around £800 p.a. It is not easy to believe that the N.P.U. representative considers his services to be worth anything less than £2,000 p.a. We are hamstrung by the employers, who dare not stand up for a reasonable figure because the rank-and-file members of the N.P.U. only give their representatives a mandate to increase their own profits, and not to put more money into the pockets of the employees. Any genuine claim for increased fees must be accompanied with a guarantee to pass on some proportion to the employees. It is obvious that the doctors have been successful in their dealings with the Minister because even the most junior partner in a practice is a contractor. On this account, one body can speak for all. All registered pharmacists in charge of N.H.S. establishments should be made contractors. The natural sequence would be that the Pharmaceutical Society would become the representative body. In negotiations that would follow, the representatives would have only one target—to press for better conditions for all members without being afraid of working for non-members, as the present N.P.U. representatives must be careful not to do at the moment. I am perfectly willing to make my one and only manager a contractor. You see I am not an employee!

C. R. PRINCE, Hull

Chapter and Verse

SIR,—May I hasten to give Mr. O. Duffelen the answers he seeks, particularly as his letter "Whither and larly as his letter "Whither and When?" is a splendidly logical presentation of thoughts which are in the minds of many of us at present. Before opening my pharmacy in Bovingdon, where none had previously existed, in 1951, I ascertained that the population was about 1,700, and that, the two medical practices which did their own dispensing, one was likely to welcome me and the other would greet me with indifference, if not hostility. The then clerk to the Executive Council said "You are, of course free to open a pharmacy where you like, but you cannot expect to make even part of your living from N.H.S. dispensing." Having left a man-agerial post in a seaside resort where there were too many pharmacies in relation to population, I was quite pre-pared to make myself the equivalent of my then salary of £550 a year without N.H.S. To achieve that I decided to retail our traditional lines and specialise in agricultural pharmacy and in the recommendation of medicines for minor ailments, human and veterinary. It was, and still is, a principle that I should refer all questions of diagnosis to the doctor or veterinary surgeon without regard to any possible reciprocity from the local members of those professions. In practice, the establishment of those principles has been appreciated by doctors and

"vets," and we enjoy cordial business and social relationships. My first balance sheet showed a turnover £3,600 and net profit of £660, excluding, of course, my wife's salary and the running of a 1932 motor for rural deliveries (with the assent of my neighbouring pharmacists, of whom the nearest was four miles away). N.H.S. figures were less than £500 gross. Now, twelve years later the village population exceeds 3,000. We have We have two resident doctors, ten visiting doctors, a dental surgeon and a veterinary surgeon. All use the pharmacy as a meeting place, and the most cordial relationships exist between professions and clients. My National Health figures for January this year were approximately: 1,200 items (£702 total payment, £570 actual payment). dispensary stock for my 1962 stocktaking was £800 and I estimate that my largest debtor, the Treasury, owes me £600-£1,000, according to the time of Under those conditions my remuneration is on paper rather than in the pocket. Counter and agricultural business, if isolated from N.H.S. would show a net profit exceeding £2,000 a year, and I only continue my contract because my fundamental job is dispensing and I should be failing the villagers and doctors if I told the Minister to take his N.H.S. dispensing elsewhere. The object of this information is to show that a pharmacist can prosper without N.H.S. simply by applying his basic knowledge and a little acumen. The old argument that N.H.S. "brings customers in" is fallacious. Whatever the sphere of activity—professional or commercial it is personal and specialised service that earns a livelihood. It is relevant to consider Mr. Darley's remarks in this context. Both the medical and legal professions practise mainly on a

population basis. One would not expect a solicitor to practise fortunetelling and the sale of greetings cards, or a surgeon to do a little tattooing. in order to augment their incomes in regions where there is insufficient population. Let it be clearly understood that my proposal, in condition number one, is for future new N.H.S. contracts. The contract in future should be linked, as is the medical contract, to a minimum economic number of population. In isolated districts, where the public need is out of proportion to the economic minimum of people, there is no reason why remuneration should not be increased and deliveries of medicines organised by local Pharmaceutical Committees.

KEITH JENKINS, Bovingdon, Herts

Staple Diet

SIR,—In reply to "Sore Fingers" (C. & D., March 23, p. 307) I would pen this reply:—

I like gadgets that make holes and things It makes work easier that way,

I like staples, I do, if put in the right

Better by far than vicious pins,
When at the month's end my scripts I
must do.

I like to staple them by 8's and by 9's, It's fun (Mr. Herdman) it's fun and its fixed!

Let us have more of this sort of letter. "Bull o' Beds"

Appreciated

After fifty-three years in business, for fifty-one of which I have been a constant reader of the C. & D., I take this opportunity of thanking you for your services and I trust that my successor will always enjoy equally cordial relations with you.—J.A.McR.

DRUGS AFFECTING BLOOD PRESSURE

Final lecture in Chelsea course

FINAL lecture in the series on recent advances in therapeutics at Chelsea College of Science and Technology was given by Dr. J. H. FRYER (CIBA Laboratories, Ltd.) on February 26. Speaking on "Drugs Affecting Blood Pressure," Dr. Fryer said that basic control of blood pressure depended on the vasomotor centre in the brain, working through the sympathetic nervous system and regulating the peripheral resistance by changing the size of the arterioles. Hypertension was not a disease in itself, but if the cause could not be identified and removed, as was most often the case, then the treatment had to be empirical. Mild degrees of hypertension might be treated with a sedative, but the speaker said he would discuss only those classes of drugs with a specific action on hypertension.

Two Modes of Action

Rescrpine acted both by depression of the central nervous system and by depleting the tissue stores of noradrenaline (released at sympathetic nerve endings). It produced a moderate fall in pressure and its tranquillising effect was often considered an advantage. The thiazides were similar in hypotensive

effect, probably acting peripherally, but their main use was in potentiating the action of other agents by increasing the sensitivity of the arterioles to them. Hydrallazine was thought to have both a central and a peripheral action; it was most reliable when used with reserpine or a thiazide.

New Agents

The recently introduced α-methyldopa produced a substantial pressure fall in most patients, but its exact mode of action was not yet known. Guanethidine acted at the neuro-muscular junction where it interfered with the production of noradrenalin, producing a significant pressure fall in about 90 per cent. of patients. Affecting only the sympathetic system, it allowed a "parasympathetic predominance" possibly giving rise to diarrhœa; but that could readily be controlled with codeine.

Finally Dr. Fryer referred to the ganglion-blocking agents. Those compounds blocked both the sympathetic and parasympathetic systems with the possibility of more serious side effects (c.g. paralytic ileus), and they were mostly now reserved for hypertension not respond-

ing to other drugs.



For Retailer, Wholesaler and Manufacturer

ESTABLISHED 1859

Published weekly at 28 Essex Street, Strand, London, W.C.2

TELEPHONE: CENTRAL 6565

TELEGRAMS: "CHEMICUS ESTRAND, LONDON"

Safety by Statute or by Moral Sanction?

It is unfortunate that the pharmaceutical industry and the Pharmaceutical Society of Great Britain are at loggerheads over their attitude to the final report of the Joint Subcommittee on the Safety of Drugs (see p. 386). It is important that the point of view of each should be fully understood by all pharmacists, especially as there is an area on which the degree of agreement appears substantial.

All but two of the Committee have plumped for an immediate voluntary scheme with moral sanctions on manufacturers as being immediately necessary to allay public anxiety, though they acknowledge the eventual desirability of control by legislative measures. The minority, both pharmacists, have shown scepticism about the effectiveness of the voluntary method and a strong belief in the practicability of securing the passage through Parliament of appropriate legislation at a minimal delay. Their views are substantially identical with those put forward by the Pharmaceutical Society in its memorandum of evidence to the Interdepartmental Working Party on Legislation Concerning Medicines; and the Pharmaceutical Society, at a Press conference on April 8, supported the view of the two pharmacists that, all necessary information having been provided to that Committee, nothing prevented speedy legislation but an apparent lack of intention on the Government's part to promote it.

However, in spite of a plea by the Pharmaceutical Society for an all-embracing review of the problem of the marketing and labelling of drugs, Lord Cohen's Committee limited itself, on the whole, to considering the arrangements for ascertaining the effects of drugs, and made recommendations accordingly. The report then states "These arrangements themselves would obviously be more effective with legislative sanction than without, and we are satisfied that legislation on

the whole subject is urgently required."

In view of that statement in the report there appears something illogical in the Committee's eventual finding, which does not appear to line up with certain known facts. One of those facts is that the Interdepartmental Working Party on Legislation Concerning Medicines some months back presented its own report to the Minister of Health, although there is apparently no intention of making the report public. The information given in that report, it seems to us, should have been at the very core of Lord Cohen's Committee's discussions, yet there has been no reference to it in this latest report, except by the "dissenters."

The majority of the Committee have, as has been said, opted for a voluntary scheme of drug safety control, and their report has been endorsed by the Minister of Health. Both the A.B.P.I. and the Proprietary Association of Great Britain have indicated their view that the proposals are capable of being implemented, and have undertaken to support them.

No doubt the members of the A.B.P.I. view the new scheme with some relief since it is in many ways similar to their original idea (see C. & D., January 26, 1963, p. 82), of an independent trust, and it appears to leave manufacturers free of the rigid ministerial control which they naturally wish to avoid.

The minority report, or "note of dissent," on the other hand, is quite forthright in its contention that the voluntary method provides only an illusion of control ("the appearance of safety without the reality").

The public will, we believe, not be content with less than the reality, so far as it can be provided (the possibility of unforeseen side effects will be present under any system) and the question seems to turn on whether the Pharmaceutical Society is right that legislation could be framed on present information and quickly put through, or whether it would take so long that the report's "voluntary" methods must be tried out in the meantime. The danger of the present clash within what might be called the pharmaceutical circle is that it may cause the subject of drug safety to become a matter of Party politics, which we believe would be to the advantage of nobody, least of all the public. The industry will undoubtedly do its utmost to make the new scheme effective, but we incline strongly to the view that it would have little to fear from controls backed by legislative sanction, and might well, on the export side, gain from the implied official approval of its products, always provided that bureaucracy did not delay unduly the approval of satisfactory products.

Overseas Trading During February

UNITED Kingdom exports of medicinal and pharmaceutical products in February, valued at £4,430,186, showed an improvement of some £400,000 over January, but the two months taken together were still below the corresponding months in 1962.

The separate items which go to make up February's total, together with the values of some bulk pharmaceuticals which are not included in that total, are given

Pharmace	UTICAL	Proi	OUCTS-	-Exports	3
)	£
Sera and vaccines					100,698
Vitamins					108,104
Antibiotics:					
Penicillin injections					98,095
tablets, ointments,	etc.				139,637
Other					379,644
Alkaloids					25,354
Aspirin					91,223
Antihistamines					52,206
Antipaludics					42,205
Barbiturates					23,220
Hormones					75,513
Glycosides					6,858
Ointments, liniments*					136,339
Organo-therapeutic glas	nds, ei	c.*			16,425
Sulphonamides					92,045
Proprietary medicines*					1,150,131
Unclassified medicines*					737,259

PHARMACEUTICALS IN BULK—EXPORTS

Vitamins]	104,295
Penicillin							163,957
Antibiotics	other	than	penicil	lin			155,926
Alkaloids			* * *		• • •	• • •	117,299
Hormones		• • •	• • •	• • •	• • •	•••	89,271
Glycosides				• • •	• • •		14,105
Organo-the		ic glar	ids	• • •	• • •	•••	26,764
	• • •	• • •	• • •	• • •	• • •	•••	30,068
Barbiturate		• • •	• • •	• • •	• • •	***	15,925
Sulphonam Glycerin		• • •	• • •	• • •	• • •	***	164,041 19,564
Citric acid	• • •	• • •	• • •	***	• • •	•••	35,030
Citile acid	• • •						22,020

PHARMACEUTICAL PRODUCTS—IMPORTS

Vitamins	 	45,553
Antibiotics	 	136,236
Alkaloids	 	74,841
Glycosides, glands, sera, vaccines	 	32,592
Proprietary and veterinary medicines	 	162,965
All other	 	70,437

^{*} Not elsewhere specified.

in the accompanying table. Australia was the leading market for Britain's exports of prepared medicines, taking goods to the value of £354,213, or just a little

up on February 1962. The Irish Republic's purchases, at £249,321, put her in second place, followed closely by Nigeria's £224,398. Export sales to four of the European Free Trade Association members and Finland totalled £405,599, and to those in the European Economic Community £450,715.

Imports of prepared medicines in February Were, at £522,624, considerably higher than in February 1962 (£373,134). Purchases were higher from all quoted sources except Holland and Belgium. The largest sellers were the United States with £106,833 and Western Germany with £91,519.

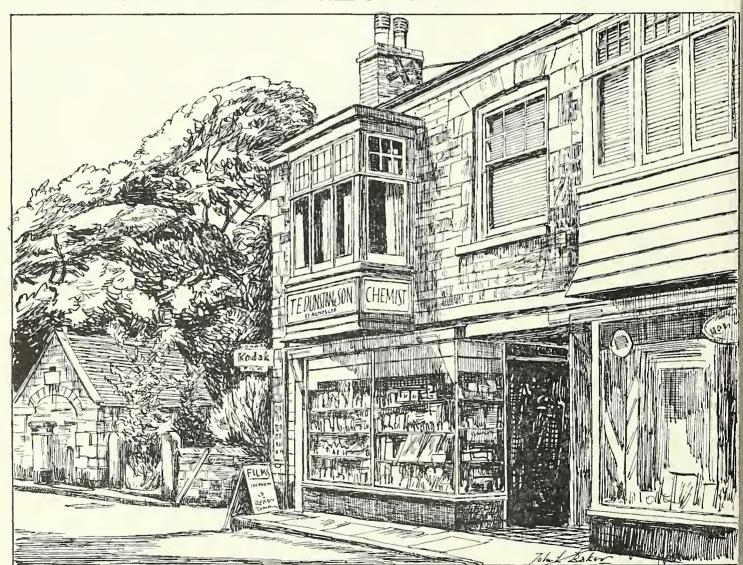
SALESMANSHIP POINTS

By Gladys Burlton

MAINTAINING GOODWILL

A COMPLAINT may prove fatal if suppressed or ignored. Dissatisfied customers are lost customers. No retailer can afford to lose them, so it is worth taking a lot of trouble to make and keep them satisfied. That is especially true if a customer brings something back. The approach of the seller then should be friendly, not one of self-defence. The customer is almost certain to respond. She comes in disgruntled, but may go out a firm friend of the shop.

PHARMACIES OF BRITAIN



THE PHARMACY AT ST. AGNES, CORNWALL

The building at 55 Vicarage Road, St. Agnes, Cornwall, in which Mr. T. E. Dunstan, M.P.S., opened a pharmacy in 1927, is about 150 years old. The little stone building at its left was originally the lych gate to an old church burial ground, and was later converted into a mortuary, though it has not been used for that purpose for about twenty years. In 1948 Mr. Dunstan was joined in business by his son, Mr. Frank Dunstan, M.P.S.

Pharmaceutical Society's Council Election

TWENTY-TWO CANDIDATES FOR SEVEN PLACES

TWENTY-TWO candidates have accepted nomination in the 1963 election of seven members to the Council of the Pharmaceutical Society of Great Britain, They are Allen ALDINGTON, London; John Edwin BALMFORD, Sutton Coldfield, Warwicks; John Farrer BARNES, Liverpool; James Cecil BLOOM-BIELD, Portemouth: Hugh Harney FIELD, Portsmouth; Hugh Hannay CAMPBELL, Edinburgh; Arthur Robert George Chamings, Shoreham-by-Sea, Sussex; Thomas Wilfred Fisher, Wakefield, Yorks; Herbert Searle Grainger, London; George Grimshaw Hammond, Reading, Berks; Kenneth Holland, Upminster, Essex; Albert Howells, Barnehurst, Kent; Donald William Hudson, Hove, Sussex; John Elliott JEFFERY, Woolston, Southampton; Keith JENKINS, Bovingdon, Herts; John Prentice KERR,

Newcastle-on-Tyne; Estelle Josephine Mary Leigh, Aughton, Lancs; Irene Frances Alice Lewis, Manchester; Archibald George Mervyn Madge, Plymouth; Arthur Gordon Reed, Leeds; Harry RIDEHALGH, Bournemouth; Charles Herbert Preston ROBINSON, Sutton-in-Ashfield, Notts; and George Hope Wright, Ackworth, nr. Ponte-fract, Yorks.

THE CONTESTANTS AND WHAT THEY OFFER

ALDINGTON, ALLEN

PROPRIETOR pharmacist and a member of Council since 1957. Has served on most Council committees, and is a member of the Finance and General Purposes, Ethical, Organisation and Publications Committees. Chairman, Films and Publicity Advisory Committees; a mem-ber, Professional and General Practice of Pharmacy Committees. A member, Executive Committee, National Pharmaceutical Union (chairman, 1956/57); Central N.H.S. (Chemist Contractors) Committee, and Committee A, Pharmaceutical Whites Coursel (Stoff side). ceutical Whitley Council (Staff side). A member of committee and past-chairman, North Metropolitan Branches, Pharmaceutical Society and National Pharmaceutical Union, A member, London Pharmaceutical Committee (chairman 1954-56). Chairman, London Executive Council. Chairman, London Committee for British Pharmaceutical Conference, Centenary meeting, 1963. A member and founder president, Harringay Rotary Club. A past-president, Photographic Dealers' Association.

POLICY: My experiences during membership of Council have shown me that my original conception of its work is the right one, and that personal contact between members of Council and the Branches provides a firm basis for this work. It has been my privilege to visit many branches and to meet many hundreds of my pharmaceutical colleagues—I greatly value these contacts and believe that they have been of mutual assistance. I believe that Council and the contact that they have been of mutual assistance. mutual assistance. I believe that Council policies must be completely understood by the members, hence communication must be improved—this is my aim. I believe that the policy that all medicines should only be available to the public through pharmacy is the right policy, is in the public interest, and should be vigorously pursued. I believe that the general practice of pharmacy should develop broadly as enunciated in the recent "Report," amended to take account of members." amended to take account of members' opinions, although admittedly this cannot be a rapid process. But the sooner it is started the sooner will there be adequate recognition of the pharmacist's proper sphere in all walks of life, civil or service. Our public relations work must play a more active rôle. We must be positive in action—we have had great achievements in the past, and can im-prove on them in the future. The Society's journal must increasingly reflect the interests of all our readers so that it becomes a mirror of their activities and a stimulant to those who give half-

hearted support to the Society. My daily work in retail pharmacy and my national experience make me well aware of today's problems. If re-elected I shall continue to devote all my efforts to the development of our calling as an increasingly important branch of the community health service.

BARNES, JOHN FARRER

QUALIFIED 1928. Proprietor pharmacist. Former member of Council. Past-chairman, Liverpool Branch, Pharmaceutical Society; a past-president, Liver-pool Chemists' Association. A member, Liverpool Pharmaceutical and Pharmaceutical Services Committees. Commitceutical Services Committee chairman, Liverpool Branch, National Pharmaceutical Union, Vicechairman, local committee, British Pharmaceutical Conference, Liverpool, 1962. Chairman, pharmacy advisory committee, and governor, Liverpool College of Technology.

POLICY: Pharmacy can drift into a position of inferiority and mediocrity

unless vigorous and positive measures are taken in the near future, Education and ethical standards together are a sheet anchor and should be maintained and strengthened, but anchorage alone is insufficient: impetus to progress is necessary to reach a position where a pharmacist can practise with dignity and the assurance of reasonable reward, both in the hospital and in general practice. The Society has been slow to realise the opportunities presented in the field of pharmacology, Revision of the code of ethics to provide greater definition is long overdue. There is little evidence of achievement towards educating the public in regard to the pharmacist's position in the community, where faithful service is the keynote. The pharmacist can do much himself by personal service and professional behaviour, but this does not relieve the Council from playing an important rôle in publicity and public relations at all levels. The Council should take prompt and positive steps, in the public interest, to seek greater control over the distribution of drugs and medicines for human and animal consumption, Irrespective of our ability to join the Common Market at some future date, the Council should at once press for authority over the registration of pharmacies and the right to improve conditions of practice. Provided with safeguards, this could benefit future pharmacy. The could benefit future pharmacy. The time may have arrived when the constitution of the Council should be examined with a view to improving the

basis of representation. In the past, I have advocated the establishment of a policy committee, solely and constantly studying trends, and formulating shortand long-term policies, thus avoiding hasty, ill-considered decisions which often conflict with good general and progressive policy. That, in my opinion, is important. In response to the declared wish of members, the Society should continue efforts to assist in negotiating satisfactory terms of service under the National Health Service with emphasis on the professional fee. My previous experience on the Council is offered to the electorate, with a willingness to serve all pharmacists on the register whatever their pharmaceutical interest.

BLOOMFIELD, JAMES CECIL

AWARDED the Genatosan scholarship and Pharmaceutical Society's Herbarium and Pharmaceutical Society's Herbarium silver medal, 1939. Qualified 1940 from Portsmouth College of Technology. Served in Royal Navy, 1944-46. A past-chairman, Portsmouth Branch, Pharmaceutical Society; past-president and former secretary, Portsmouth Chemists' Association: Association; a past-chairman and former secretary, Portsmouth Branch, National Pharmaceutical Union. Secretary, Portsmouth Pharmaceutical Committee and a member, Portsmouth Executive Council. A member, advisory committee, Portsmouth College of Technology. A member, Proprietary Articles Trade Association council. Chairman, History of Pharmacy Committee Pharmacy and Society and Pharmacy Committee Pharmacyutical Society and mittee, Pharmaceutical Society, and Society's representative on committee of management, Chelsea physic garden. Chairman, local committee, British Pharmaceutical Conference, Portsmouth, 1961. A member of Council and a justice of the peace.

POLICY: It has always been my aim to bring about a closer understanding between the Council and the membership. More information about decisions and reasons for policy should be given to the members, both through the pharmaceutical Press and by private communication where necessary. During my service I have visited many branches and believe that those personal contacts have been useful and valuable. Our greatest need at the present time is for unity within the profession, sectional differences giving way to the over-riding importance of our common bond—the qualification. In my view it is essential for the Society to interest itself in the economic well-being of its members, and for that reason I want to see the Council represented

officially on the Central N.H.S. (Chemist Contractors) Committee That, to me, is not only desirable but absolutely necessary if we are to make any progress at all with the Ministry of Health. I supported the formation of the coordinating committee representing interests in pharmacy, but I regard this as one step only in a much bigger programme. I have been outspoken in my plea for the publication by the Society of a scale of professional fees, which are realistic of a pharmacist's knowledge and responsibility. Our status is governed by our own behaviour and the value we place upon ourselves. We require a vigorous public relations programme organised by an experienced officer on the staff to project a favourable image of pharmacy to all sections of the community. I also believe that we need to be more active over recruitment, and I want to see an early start made with the man-power survey. In all things it has been my constant endeavour to represent faithfully the views of the Society's membership, and if re-elected, I will continue to give my time and the best of my ability for the benefit of all pharmacists irrespective of occupational interest.

CAMPBELL, HUGH HANNAY

QUALIFIED 1931 after apprenticeship with A. K. Stewart & Co., Edinburgh. Bachelor of Science, Fellow, Royal Institute of Chemistry, Associate, Heriot-Watt College, Presently head of pharmacy department, Heriot-Watt College, Edinburgh. Has served on council, Royal Institute of Chemistry; is a member, Institute's board of examiners for Scotland, formerly a member, board of examiners for Northern Ireland and since 1960, a co-opted member, Education Committee, Pharmaceutical Society

POLICY: Having been engaged so long in teaching it is natural that the educational policy of the Society should be of particular interest to me. I believe that we have reached a stage when that policy is based on sound lines and that through it the status of the pharmacist will steadily rise. Nevertheless, it must be continually emphasised that the application of the policy should concentrate on a suitable training for pharmacists who will be engaged in the General Practice of Pharmacy. I am not convinced that any period of academic training can induce the sense of responsibility so necessary in dispensing, and which can only be acquired by contact with experienced pharmacists in the dayto-day work of a hospital or general pharmacy. Because of this I consider that the prescribed period of practical training should be strictly interpreted as training for responsibility in dispensing drugs for patients' use. Admission to the register can now be achieved by different routes and it is most important that the Society retain full control of the register and guard against losing any rights of registration to other institutions granting qualifications exempting from the Society's examination. In the same vein I feel that any form of qualification as an "assistant" should be under the control of the Council. The Council can, and should, take steps to enhance the status of pharmacists. That can sometimes be done directly,

sometimes indirectly, but to expect the Council to act as a negotiating body for salaries and scales of remuneration would have the effect of lowering the prestige of the Society in negotiating on purely professional matters. I would deplore this or any other steps that would lessen in any way the authority of the Council and consequently diminish the profession of pharmacy as a whole.

CHAMINGS, ARTHUR ROBERT GEORGE

AT present living at Shoreham-by-Sea, Sussex. A member of Council, Pharmaceutical Society, and a pharmaceutical consultant. Qualified 1925. Has experience in retail, academic and industrial spheres in pharmacy. Formerly head of the school of pharmacy, Leicester College of Science and Technology. Subsequently held responsible posts in the pharmaceutical industry. At present a member of the following committees of the Council: Benevolent Fund, Education, Organisation, Public Services and Films. An honorary life member, British Pharmaceutical Students' Association. A member, advisory committee for pharmaceutical education, University of Nottingham, and of the International Pharmaceutical Federation. A governor of grammar and secondary modern schools in West Sussex.

POLICY: Following forty years of wide experience in the practice of pharmacy I was elected to Council three years ago and now seek re-election. The background of ten years in retail, twelve years as head of a school of pharmacy, and twenty years in the industry has — with my "apprenticeship" on the Council—provided me, I believe, with a broad picture of the needs of pharmacy and especially of the interdependence of the various branches of our profession. In the lectures I have been privileged to give over many years to most branches of the Society I have been concerned not only with emphasising the need for the pharmacist to become the repository of knowledge on therapeutic trends, but also by emphasising the fact that with such knowledge the relations of pharmacist and doctor shall be strengthened to their mutual benefit. The proper alliance of pharmacy and medicine in negotiation of all kinds would be un-assailable and therefore must be diligently pursued; more than anything it would contribute to the fulfilment of the aspirations of the Committee on the General Practice of Pharmacythe right medicine should be supplied in the right form with the right safeguards at the right time, at the right place." Two other matters of concern to us all will, I am sure, increasingly require vigilance. There is a growing tendency for unqualified persons in all branches of pharmacy to be assuming the rôle of pharmacists—such dilution will seriously denigrate our professional status in the eyes of our various publics—from the Minister of Health downwards. And, in conclusion, in common with the rest of the population, even pharmacists are living longer and this calls now for a re-appraisal of the measures at present being followed for dealing with the needs of our ageing colleagues.

FISHER, THOMAS WILFRED

EDUCATED at Cowley Grammar School, St. Helens, Lancs, apprenticed with Mr. G. Hemingway, Ph.C., Prescot, Lancs. Qualified from Bloomsbury Square via Liverpool school of pharmacy, Joined Boots organisation 1927, holding managements in Liverpool (night service), Hull (two branches), Leeds (day and night service), Lincoln and Wakefield. A past-chairman, Leeds Branch, Pharmaceutical Society, pasttreasurer for ten years. A member Leeds Pharmaceutical Committee. A past-member pharmaceutical advisory committee, Leeds Technical College. Past-secretary (acting), Lincoln Branch, Pharmaceutical Society. Founder member and past-chairman, Boots Pharmacists' Association on T4 and T33. Present treasurer, Leeds and District Branch, Pharmaceutical Society. A member, Wakefield Pharmaceutical member, Wakefield Pharmaceutical Committee Secretary, Wakefield Health Services Professional Liaison Committee. A member, Wakefield Hours-of-Service Committee. Aged fifty-seven.

POLICY: 21 per cent. of members of the Society are retail employees who, with 11 per cent. in industry, are unorganised and probably uninterested. They must be persuaded that the Society needs their support and experience, of which the Council has rarely had the benefit, and retail employee outlook could be vital to it. I would work for the greater unity of all sec-tions now essential for pharmacy's sound future. The need to modify the original intention of one section to publish a scale of dispensing fees without general agreement and the failure to agree on the Society's representation on Central N.H.S. (Chemist Contractors) Committee emphasises to our common employer, the Minister Health, our weak bargaining position. The Statement upon Matters of Professional Conduct will be debated by Branch Representatives, and as its stated object is to raise professional status I support fully that principle. Many provisions will need legislation, and so the legitimate interests of different parties will be protected. I favour stricter control of claims for medicines on all advertising media, and the Council can logically claim to act as co-ordinator of the thirteen Committees now supposedly responsible. I support the objects of the Working Party on Medicines Legislation, particularly that proposing the restriction of the sale of medicines to pharmacists. which must strive to attract younger members, need urging to become centres of strenuous efforts to raise professional standards. Public relations are influenced most by members in their own public contacts, on whom they impress their own image and so are their own goodwill agents. Some major criticisms of pharmaceutical industry could be minimised by closer liaison with the Society to ensure that increased production and wider distribution are not main criteria. New drugs must be submitted to even more stringent testing and sales control. The Council must lead in strengthening pharmacists' relationship with other Health Service professions by encouraging joint professional committees.

(Remainder later)

Anthracene Derivatives found in Nature

THEIR CHEMISTRY AND ACTIVITY

AT an evening meeting of the Pharmaceutical Society held in London on March 13, PROFESSOR J. W. FAIRBAIRN (department of pharmacognosy, School of Pharmacy, University of London) gave an address on "Anthracene Derivatives of Natural Occurrence."

He said that quinone compounds, such as benzoquinones, naphthaquinones, anthraquinones and phenanthraquinones, occurred widely in the plant and animal kingdoms; some of them, such as vitamin K (naphthaquinone) and ubiquinone (benzoquinone) were known to be of considerable physiological importance. Nearly all naturally occurring anthracene derivatives contained phenolic groups and the speaker showed illustrations of the chemical structures found (fig. 1).

$$R \dots CH_3$$
=Chrysophanol $R \dots CH_2OH$ =Aloe-emodin $R \dots COOH$ =Rhein $R \dots COOH$

A number of widely used vegetable purgatives such as senna, cascara, aloes, cassia pulp, frangula, buckthorn and rhubarb contained anthracene derivatives and a detailed study of the pharmacognosy of that group had been made at the School of Pharmacy. The compounds were particularly suitable for pharmacognostical investigations because (a) they were clinically effective; (b) they had a well defined pharmacological action; and (c) they contained similar chemical constituents which responded to the same colori-metric (Bornträger) test. Numerous attempts had been made to correlate measurements of pharmacological activity with chemical estimation of the anthraquinone content, as measured by the Bornträger test, but little correlation had been evident. By applying suitable quantitative methods, the speaker had shown that the anthracene derivatives of senna, cascara and rhubarb were highly active as "anthrone" glycosides, less active as free "anthrones" and much less active as free anthraquinones. That work had shown that, though the

to it, they produced peristaltic effects but, if taken by mouth, they mostly disappeared before reaching the large intestine. However, in the form of glycosides, they reached the large intestine intact, the sugar fragments were broken off and the liberated aglycones exerted their effect. The sugar groups therefore acted as a transporting agent. second factor was the partial reduction of the meso-carbonyl groups; thus "anthrones "were more active than anthraquinones and "anthrone" glycosides more active than anthraquinone glycosides. A third possible factor was the presence and position of the hydroxy groups. Working on vegetable laxative constituents and on certain fungal anthraquinones it was noted that those with one hydroxy group were inactive, those with two were active and those with three were active provided that all three were not a-hydroxy groups. Progressive removal of free phenol groups from cathartic substances led to loss of activity; and it had been found that acetylation of the sennosides led to complete loss of activity.

Senna Pod and Leaf

Stoll and co-workers had made an important advance when they isolated two active glycosides, sennosides A and B. Starting with those, the speaker had shown that there was good correlation between the pharmacological activity of senna pod, measured in mice, and the sennoside content. Furthermore clinical trials showed that what was true of mice was true of man. However, 1 gm. of a sample of powdered pod which contained 35 mgm, of sennosides by chemical assay, had a biological activity equivalent to 62 mgm. (i.e., the sennosides accounted for only 57 per cent. of the biological activity). Recent work by Friedmann, Ryan and Fairbairn (1958) offered an explanation of that anomaly. Primary glycosides, which on mild hydrolysis broke down to sennosides, had been shown to be present in the pods and they were 50 to 100 per cent. more active than the sennosides. Some of those primary glycosides contained four to ten glucose units and the biological activity seemed to increase with

Fig. 2 reduction anthraquinone \rightleftharpoons anthrone \rightleftharpoons oxidation isomerisation

free anthraquinones contributed to the red colour of the Bornträger test, they contributed practically nothing to the pharmacological activity; hence the lack of correlation between colorimetric and biological assays.

For maximum activity, at least two factors were important. First, the presence of sugar groups. The aglycones were the active substances in the large intestine because, when added directly

the amount of sugar present. If, therefore, all the glycosides in the pod were in that primary form, the anomaly referred to would be explained (in the example, 37 + 75 per cent.=61 mgm.). Because of analytical difficulties it had not yet been possible to settle this problem.

anthranol

When the methods used for the pod were applied to the leaf, it was found that although the leaf contained less sennosides, it was more active and that was ultimately shown to be due to the presence of a third glycoside based on aloe-emodin. In the pod it constituted only about 2 to 5 per cent, of the total anthracene glycosides; in the leaf it constituted 12 to 20 per cent. At that concentration it exerted a potentiating effect of about 1.7, and when that factor was taken into account (by multiplying the chemical assay figures by 1.7 where the third glycoside content was significantly over 10 per cent.) the anomaly between sennoside content and biological activity was largely explained. Although only small quantities of that glycoside had been isolated, it was evident that a quinone and a dianthrone glycoside were present.

Cascara

No active glycosides of known constitution had been isolated from cascara when the speaker and his coworkers had started their work, but it seemed that the methods used so successfully for senna would be equally applicable to cascara, and, in fact, a good correlation of the results of biological and chemical assays was obtained. However, comparison of the results with those of clinical trials on cascara tablets and standardised senna indicated that the pharmacological assay was measuring only about 15 to 20 per cent, of the total activity of cascara extract. Simultaneously other workers showed that the chemical assay being used was probably measuring only a small proportion of the total anthracene derivatives. One could conclude from those two disturbing facts that both pharmacological and chemical methods of assay were measuring only a fraction of the total active substances. That had since been confirmed.

The same workers had shown that cascara contained two types of anthracene compounds: (a) normal glycosides (mainly based on emodin, which gave the red colour in the chemical test) representing about one-fifth of the total: (b) aloin-like compounds, representing about four-fifths of the total. The latter group of compounds did not yield free anthraquinones on normal acid hydrolysis, and would therefore not be estimated by the normal assay procedure. Furthermore, mice were resistant to aloin; hence the bioassay method used would not measure their effect either.

The good correlation earlier reported was therefore due to the fact they had been measuring only the normal glycosides, both chemically and biologically

sides, both chemically and biologically. They had isolated (or obtained good evidence for the existence of) about a dozen glycosidal anthracene derivatives, at least seven of which were aloin-like (or C-glycosides) and the remainder normal (or O-glycosides). Four of the C-glycosides had been isolated in pure form and had been called "cascarosides." Cascarosides A and B were optical isomers, being glucosides of (+) barbaloin and (-) barbaloin, respectively. No C-glycosides had been found in Rhamnus frangula and R. fallax.

Fig. 4. Schindler's glycoside from cascara.

Aloes and Barbaloin

The fact that the aglycones of cascarosides A and B were optical isomers of barbaloin suggested that aloes and aloin might contain either or both of them, but they had not yet succeeded in separating them in sufficient quantities for confirmation. Since barbaloin was an important constituent of both cascara and aloes, they had attempted to assay it chemically and biologically. On the chemical side they had worked out the conditions for the quantitative conversion of barbaloin to aloe-emodin, using ferric chloride and hydrochloric acid, and experimental results had been within 98 to 100 per cent, of the theoretical yield. They hoped to publish a method of assay based on that reaction shortly, but on the pharmacological side they had not, as yet, been so successful.

Pharmaceutical Application

The work on senna had enabled methods for the evaluation of its activity to be devised and using those methods they had shown that the (then) official methods of extracting senna were very inefficient and that, on storliquid preparations deteriorated rapidly. Consequently, official prepara-tions varied greatly in potency; as much as a thirty-fold difference between potencies of samples of syrup of senna had been found, resulting in liquid preparations dropping out of favour. Results for cascara indicated that (a) the present method of preparing dried extract of cascara converted much of the cascarosides to aloin (with a probable loss of activity) and (b) there was a total loss of combined anthraquinones in the process. They also indicated that samples of cascara extract could be made which conformed to the present British Pharmacopæia requirements but were sadly lacking in active constituents. Thus tablets might well vary in potency as much as the senna preparations referred to earlier.

Possible Function in the Plant

The presence of sugars in the anthracene derivatives discussed suggested that they might function as soluble forms

of carbohydrate reserve. That suggestion was strengthened by the amount present which, at the time of collection, was surprisingly high (in senna pericarp, for example, as much as 10 to 15 per cent, and in cascara bark 6 to 8 per cent, of the dry weight). Both those tissues could act as storage organs for rapidly developing organs: senna pericarp for the ripening seeds and cascara bark for the developing shoot and leaves. Betts (1961) had studied the changes in the anthracene derivatives of cascara bark during three successive seasons and his results indicated that anthracene derivatives were synthesised in the leaves and stored in the bark in the autumn and winter, especially in the form of aloin-like compounds. During spring growth those compounds were used to supply anthraquinones to the rapidly developing shoot and leaf. They seemed to be transported mainly as O-glycosides, since that type of glycoside predominated in the leaf and young shoot.

Conclusions

Professor Fairbairn said that the group of drugs had a long and established reputation as efficient purgatives but without a thorough understanding of their phytochemistry they might well have been discarded, owing to variability in their final pharmaceutical formulations. He asked whether other potentially useful items of the vegetable materia medica had been discarded on similar grounds. Modern man required sophisticated methods of administration of medicaments. That, in turn, demanded sophisticated knowledge of both the raw materials and their finished products.

Discussion

MR. E. A. ELSBURY said that some firms put out cascara as it was, whereas other "debitterised," either by chemical or solvent means. Using solvents, the bitter barbaloin type of glycoside was removed, leaving in the resulting extract only the primary type. To make up for the glycosides removed in that process, extra material was used, and the questioner asked whether, in view of possible future standards, the debitterised extract would be "ethical." Professor Fairbairn agreed that the bitterness was due to the free barbaloins, and that the glycosides were tasteless: if the barbaloin was removed leaving the cascarosides, the product would certainly be "ethical." The removal could be done with ethyl acetate solvent, Magnesium oxide treatment probably converted barbaloin into C-glycosides with some, but not much, loss of activity.

MR. E. W. GODDING asked whether there was any support for the practice of maturing cascara bark for three years before extraction. THE SPEAKER said that it was not necessary; on the West coast of America, five months was considered enough. Some change from glycosides to free compounds might occur during drying but, once dry, they were extremely stable

tremely stable.

DR. W. MITCHELL inquired if Professor Fairbairn had been able to study the action upon the intact primary glycosides of the third glycoside which had the synergistic action on the sennosides.

THE SPEAKER said that glycoside must be isolated in a pure form before the problem could be tied up satisfactorily. DR. J. M. ROWSON said that synergism of the same order had been found between verodoxin and the other glyco-sides in digitalis. Verodoxin potentiated similarly any one or a mixture of the glycosides and he suggested that a parallel might be found with the third glycoside in senna. Professor Fairbairn had spoken of glycosides with up to eight sugar units—had a maximum been reached? THE SPEAKER said that a glycoside thought to have ten glucose units had recently been found. In reply to a question on the colour test for anthraquinones, he thought the chromophore was produced by the presence of aromatic rings and conjugations, as in phenolphthalein. Barbaloin and sennodine gave a yellow colour with alkali but would give the pink colour reaction after oxidation. DR. L. K. SHARP thought the colour due to resonance between four or five enolic forms of the anion.

MR. M. AIKEN asked in what way the British Pharmacopæia preparations could be improved and less of their activity lost. PROFESSOR FAIRBAIRN replied that senna preparations had been deleted, and rhubarb was found only as the crude drug. Cascara extracts would probably be improved by better methods of solvent extraction and more

care in the heating stages.

MR. C. A. JOHNSON said that an experiment had been carried out in which a sample of senna had been assayed chemically and biologically, with reasonable correlation in the results. Immediate assays after extraction were in similar ratio but, after storage for only a fortnight, the biological activity was 10 per cent, and the chemical activity 80 per cent., of the original. Could the speaker explain that significant difference? The solvent and vehicle had been alcoholic. Professor Fairbairn said an aqueous solvent extracted enzymes which would rapidly break off the sugar part of the molecule; alcohol was even more deleterious than water. The product of hydrolysis would have the anthracene nucleus and give the colour reaction but it would not be biologically

DR. T. E. Wallis asked whether the work done by Professor Fairbairn might give an indication of the way in which sugar was used in the plant and whether, since cascara and senna contained much calcium oxalate, that might be one of the breakdown products. The Speaker replied that of all the compounds composed of the elements of carbon dioxide and water, calcium oxalate had the least energy content, and it was probably convenient for the plant to produce that solid substance. Proposed work on growing the plants in radioactive carbon dioxide might show whether calcium oxalate was a breakdown product of sennosides.

[Professor Fairbairn states that further details are being given in an article he is contributing to a forthcoming issue of *Lloydia*.]

N.H.S. STATISTICS

In OLDHAM during October 1962, 56,782 prescriptions were dispensed at an average total cost of 93.78d.

DRUG TESTING UNDER THE HEALTH SERVICE

A recently completed survey of samples taken during 1954-55

A SURVEY of the National Health National Service drug testing scheme in England and Wales for the year ended March 31, 1955, has been prepared by Mr. J. W. Price, F.P.S. (pharmaceutical section, Ministry

Health).
The tabulations and other details correspond to those in previous surveys (C. & D., January 21, 1956, p. 56 and March 28, 1959, p. 345), so that direct comparisons may be made. The report shows that 7,230 certificates of analysis were issued in 1954-55 compared with 7,393 issued in 1953-54 and 7,261 in 1951-52. The number of certifi-cates referred to Pharmaceutical Service Com-mittees in 1954-55 was 462 compared with 489 in 1953–54 and 583 in 1951–52. Thus the number of certificates referred to cates referred to Pharmaceutical Service Committees has de-clined. As in all the other surveys the results have been taken from certificates of analysis of prepara-tions and dressings sampled in England and Wales.

Scope of Survey

The principal results concern extemporaneously prepared mixtures but details are also given of the dispensing of tablets, pow-ders and ointders and oint-ments. Examples are provided of errors other than those of measure-ment, Table 1 lists constituent drugs of the mixtures, gargles, eye lotions, etc., sampled and pre-

TA	ABLE 1: P	PERCENTAGE DEVIATIONS FROM THE WEIGHTS OR VOLUMES OF DRUGS ORDERED ON TEST PRESCRIPTIONS													
Prescribed	Number					ımber o	of percer	ntage dev	iations	within t					
Quantity gr. or	of Prescrip-				eferred							erred		1000/	
min.	tions	to 1%	1·01 to 2%	2·01 to 5·0%	5·01 to 10%	Over 10%	Total	5 to 10%	11 to 20%	21 to 30%	31 to 50%	51 to 75%	Over 75%	100 % and over	Total
Ammoniur 16	n bicarbon 25	ate 2		6	3	12	23			2					2
24 40	85 13	12 1	4 3	21 6	24	21	82 10	\equiv	1		1	=		11	2 3 3
48 60	48 191	1 4 67	7 21	15 55	5 27	5 8	46 178	_		<u></u>		<u></u>	2 1	_	13
72 Ammoniur		102	34	65	23	10	234	1	10	2	4	1	1	1^1a	20
120 360 Boric acid	102 69	44 32	16 13	31 21	6 1		98 67		2 1	_	_	1	_	_	4 2
16 60 90	30 36 34	8 18 11	5 4 6	9 8 9	4 3 4		28 33 30	=	2 1 1	1		_ _ 1	=	=	2 3 4
Chloral hy 120	drate 120	64	26	25	2	_	117	_	3	_	_	_	_		3
Citric acid 64 144	52 76	26 24	3 16	15 23	4 4	- 1	48 68		2 4		1	=	_	1 ²	4 8
216 Ephedrine 8	294 hydrochlor 38	136 ide 22	41	73 10	19 2	1	270 37	6	10	1	4	3	_	_	24
Glycerin o 192 360	f phenol 37 38	20 21	5	5	3	_	33 27	_	1 2	2 1	1 3	_	_	<u>_</u> 13	4 11
Hydrochlo 160 240		45 145	7 17	10 44	3		65 214	<u>-</u>	<u></u>	- 3	2		_	_	2
Ferric amr 480	nonium citi 28	rate 14	3	10	_	_	27		1	_	_		_	_	1
720 Kaolin 720	118 57	88 32	6 5	18 15	3	_	116 55	1	_	1	_	1	_	_	2 2
Liquefied 1	ohenol 32	. 17	3	9	1		30	_	1	1	_		_	_	2 7
60 120 Light mag	110 41 nesium carl	71 18 bonate	7 2	17 10	8 4	1	103 35	1	3	_	1	1	=	=	6
120 160 240	29 23 100	12 11 52	$\frac{3}{11}$	12 9 22	1 2 3	_	28 22 88	_	1 1	$\frac{-}{2}$			=	=	$\frac{1}{13}$
Magnesiur 1440	n sulphate 43	30	2	7	1	_	40	1	_	1	1	_	_	_	3
160 360	bicarbonat 23 143	e 77	5 20	9 28		_	23 130			<u> </u>	<u> </u>	<u> </u>	_	<u></u>	13
Potassium 160 240	86 564	49 376	12 53	22 99	2 14		85 544	<u> </u>	- 9		1	_	_		1 20
320 Potassium 80	chlorate 41	15 18	3 9	3 13	1	_	22 41	_		_	_	_	_	_	_
120 Potassium 720	173 citrate 101	75 37	27 19	50 32	10 6	_ 2	162 96	4	3 2	2	1		_	 1 e	11 5
1080 Potassium 48	267	106 9	58 8	65 8	19	2	250	2	8	3	3	i	_	_	17
60 72	95 187	47 105	12 24	24 32	6 11	<u></u>	89 173	3	1 9	1 2	1 1 2	<u> </u>	<u></u>	=	2 6 14
Sodium bi 30 40	50 37	23 18	8 4	10 9	4 3	1	46 34	<u> </u>	_1	<u> </u>		1	=	27	4 3
42 160	19 17 5	8 84	3 17	7 61	6	_	19 168		1		3	_	_	=	7 25 2
240 320 360	724 18 65	364 12 -27	108 1 10	187 2 18	39 1 1	<u>1</u> 	699 16 56	3 1 1	$\frac{7}{2}$	5 1 2	$-\frac{7}{4}$		=		25 2 9
Sodium ch 60 72		21 26	10	13 17	3 6	_	47 57	2	_	_	1		_	_	3
Sodium ci 1080	trate 24	8	8	7	1	_	24	_	_	_	_	_	_	_	_
Sodium sa 160 240	35 149	19 59	6 22	7 49	1 13	_	33 143	<u> </u>	1 3	1	_	_	_	=	2 6
360 Sodium su 875	143	82 14	$\frac{\overline{26}}{3}$	19 6	3	_	130	3	6	1	2	_	_	19	13
Solution o	f ferric chle	oride 33	4	17	1 6	_	24 60		1 6	_ 1	_	1	_	_	1 8
Solution o	f potassiun 41	n hydro: 28	4	6	1	1	40	_	_	_	_	_	_	110	1
96	ution of lea	28	cetate 1	9	9	•—	47	1	4	1	2	2	_	_	10
960 1440	odeine pho 147 28	74 7	20 ,	27	25 13	_	146 28	_	_	_	=	1	=	_	1
1920 Zinc sulph	49 iate 34	33 15	8	6 9	2 3	_	49 31	_		_	_	_	_	— 111	_ 3
	41	3077	811	15	389	76	40 5829	<u>-</u> 49	127	<u> </u>	65	28	7	14	351
20.70	- 200	- 0 . ,			207	, 0			/	0.1	00	20	,	14	221

^{1 2} Absent.

1(a) A mixture containing only tincture of chloroform and morphine dispensed.

2 Liquified phenol dispensed.

4 Sodium bicarbonate dispensed.

Sodium bromide dispensed.

Ammonium chloride dispensed.
Double quantity dispensed.
+144 per cent.

Sodium bicarbonate dispensed.
 Potassium hydroxide solution absent.
 Four times required amount of zinc sulphate dispensed.

scribed on thirty or more test prescriptions during the year, except where it has been necessary to include items for comparison with the previous surveys. Ûntil April 1955, certificates were referred to Pharmaceutical Service Committees if the error exceeded 10 per cent.; some, subject to the analyst's comments, if the error exceeded 5 per cent. The table shows that 309 cases of errors of 5-10 per cent. were not referred, and forty-nine were, and seventy-six cases of crrors exceeding 10 per cent. were not referred and 127 were. The explanation of the apparent leniency is that the limit for preparations of ammonium bicarbonate which also included liquid extract of liquorice was extended to 20 per cent. Footnotes to the table give the explanation of why certain drugs appear in the column headed "100 per cent. and over.'

Prescriptions per Product

Table 2 lists the total number of prescriptions for those drugs given in table I and the number of each referred to Pharmaceutical Service Committees.

TABLE 2

	- I	NT 1
Drug	Number prescribed	Number referred
Ammonium bicarbonate	652	43
Ammonium chloride	207	7
Boric acid	122	10
Chloral hydrate	161	3
Citric acid	453	40
Ephedrine hydrochloride	47	2
Glycerin of phenol	77	16
Hydrochloric acid	307	13
Ferric ammonium citrate	158	3
Kaolin	91	3
Liquefied phenol	244	19
Light magnesium		
carbonate	164	13
Magnesium sulphate	63	4
Potassium bicarbonate	199	14
Potassium bromide	723	23
Potassium chlorate	241	13
Potassium citrate	425	25
Potassium iodide	351	24
Sodium bicarbonate	1,180	52
Sodium chloride	154	3
Sodium citrate	49	
Sodium salicylate	347	22
Sodium sulphate	27	1
Solution of ferric chloride	112	14
Solution of potassium		
hydroxide	70	3
Syrup of codeine phos-		
phate	240	1
Strong solution of lead		
subacetate	63	12
Zinc sulphate	140	6
TOTALS	7,067	389

Table 3 is included for the first time in the survey. It lists those drugs which have not appeared in Tables 1 or 2, but which are prescribed fairly frequently.

TABLE 3

Drug	Number prescribed	Number referred
Ammonium bromide .	30	
Arsenical solution .	17	l —
Borax	53	
Copper sulphate .	32	2
Glycerin	26	2
Industrial methylated		
spirit	40	4
Sodium bromide .	20	-
Strong solution of		
ammonium acetate .	16	1
Zinc chloride	12	2
TOTALS	246	11

Tables 4 and 5 list the percentage deviations of dispensed volumes of liquid preparations; the results were obtained

TABLE 4: MIXTURES, LINCTUSES, ETC.

	ercentage a	eviations fro	om the pres	cribea voiui	nes of uqui	a preparatio	ons	
Prescribed Volume	Up to 1%	1·1 to 2·5%	2·6 to 5%	5·1 to 7·5%	7.6 to 20%	10·1 to 20%	Over 20%	Total
2 fl. oz. 3 ,,, 4 ,,, 6 ,,, 10 ,,, 11 ,,, 12 ,,, 14 ,,, 16 ,,, 20 ,,,	3 1 67 14 239 10 1,447	112 20 364 16 589 57	1 7 84 18 68 5 721 1 10	7 20 2 9 1 51	4 8 -1 1 1 -	1 7		4 19 293 54 681 34 2,822 1 97
Totals	1,822	1,163	917	91	15	8	8	4,024

258 of the 4,024 were referred.

TABLE 5: GARGLES, LOTIONS, ETC.

	ercentage a	eviations fro	om the pres	cribea voiui	nes of uqui	a preparatio	ons	
Prescribed	Up to 1%	1·1 to 2·5%	2·6 to 5%	5·1 to 7·5%	7·6 to 20%	10·1 to 20%	Over 20%	Total
i fi. oz. i ,, 2 ,, 3 ,, 4 ,,	1 44 2 3 25	$\frac{-}{22}$	1 48 9 6 61	- 8 5 1	$\frac{-}{17}$ $\frac{3}{-6}$	<u> </u>	$\frac{-}{2}$	1 1 142 19 12 139
8 ., 9 ., 10 ., 12 ., 20 .,	115 	322 1 1 25 1	121 2 14 	33 4 2 1	- - -	1 1 1 —	5 - - -	599 1 19 66 2
Totals	225	414	262	60	28	4	8	1001

110 of the 1,001, were referred.

from both referred and non-referred certificates of analysis. The majority were cases where the actual volume dispensed deviated from the prescribed volume because of a variation in the size of the bottle used, the others were cases where

the dispensed volume differed from that prescribed because of a dispensing error. The total number prescribed, and the number referred are given.

[Other findings will be published later.—EDITOR.]

LEEDS JOINT CONTRACTING COMMITTEE

First report on work done

A REPORT on the working of the Leeds Region Joint Contracting Coordinating Committee (Drugs) has recently been issued. Outlining the history of the Committee, the report says that early in 1957 a working party (four pharmacists and four supplies officers) was inaugurated to investigate the possible advantages of joint contracting for drugs and to recommend a procedure by which such a scheme could best be put into operation. The working party had concluded that items representing approximately 30 per cent, of the drug expenditure were, at the start, likely to be procured more economically by joint contracts. The most economic purchasing area was considered to be less than the Leeds Regional Hospital Board's administrative area. Three areas, each undertaking joint contracting, were recommended, with a co-ordinating committee.

The recommendations were approved by the pharmacists and supplies officers and in 1962, the board of governors and all hospital management committees in the Region participated in the scheme. The three area committees are reported as having been able to obtain terms equivalent to those negotiated by a purchasing committee contracting for their combined requirements. In those instances where better terms were clearly available on a wider basis, contract arrangements were dealt with by the Co-ordinating Committee. Among the matters undertaken by the committee had been:

Preparations of conditions of tender.

Comparison of contract terms negotiated by area contracting committees.

Consideration of facilities in pharmaceutical departments for manufacturing pharmaceutical preparations that could be produced more economically that way than by purchase under contract.

than by purchase under contract.

Investigation of firms applying to be included in lists of tenderers.

Preparatory work leading to the negotiating of a contract by the Ministry of Health for halothane. In that instance, the Committee considers that technical progress by a manufacturer had progressed to a state that competition from substitute products was almost eliminated. With increased demand there had been no response in price revision and it was considered that the bargaining process could, with advantage, be pursued by the Ministry.

Reviews of the work undertaken by comparable organisations.

Purchase of drugs the subject of patent protection and the maintenance of a register of information.

Estimated annual value of contracts for the year ended March 31 placed by the committees was £210,000, at an estimated annual saving of £45,000. The contracts accounted for 32 per cent, of the expenditure on drugs and dressings.

The report concludes that quality and efficacy of pharmaceuticals were "even more important than price," but that, joint purchasing had been a restraining influence on prices. The scheme had achieved substantial economies as a result of the support of pharmacists and supplies officers throughout the Region.

This is the Vi-Daylin moment. It comes once a day and there is absolutely no mistaking how children feel about it. It is a treat that becomes a habit. A habit that assures accepted dosage. Yes children of all ages love Vi-Daylin.



minadex -for a brighter outlook after illness



So many customers, particularly your younger ones, at this time of the year need the tonic effect of Minadex. Famous for over 20 years, Minadex has no official equivalent. It is a safe and utterly reliable combination of vitamins, iron, glycerophosphates and copper, and its appetising orange flavour appeals to children and adults alike...even its price is a tonicl

ex the low-priced vitamin-mineral tonic

In 6 and 12 fl. oz. bottles. Retail prices 3/- and 5/2.

ORDER MINADEX IN THESE EXTRA-PROFIT PARCELS

Minadex Parcel No. 1: 24 x 6 oz. bottles 48/-. Minadex Parcel No. 2: 12 x 12 oz. bottles 41/4.



The name Minadex is a Glaxo trade mark

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, APRIL 9: There were no important developments in the CRUDE DRUGS market during the week. A few items that had been in short supply appeared to be more plentiful on the spot. On the other hand a number of others became scarce.

BENZOIN "ALMONDS" were difficult to find and prices were much dearer than previously. Brazilian MENTHOL was again easier with the dearer grades down by one shilling per lb. for shipment and by sixpence on the spot. QUILLAIA for shipment was offered at 140s., c.i.f., per cwt. against 137s. 6d. CARDAMOMS (aleppy greens) were dearer by sixpence per lb. Indian HENNA was sharply advanced by 10s. per lb. in both positions. Gum ACACIA on the spot was dearer by 2s. 6d. per cwt. although forward offers remained steady. AROMATIC SEEDS Moroccan CORIANDER and FENUGREEK were advanced and in Waxes, Carnauba was dearer by between 10s. and 20s. per cwt. according to grade.

The Board of Trade has given notice that it is considering an application for the removal of import duty from a list of over 30 BOTANICAL DRUGS (see p. 383).

The most important development in the ESSENTIAL OIL market was an announcement that the Indian Government on April 3 had decided to licence freely the export of lemongrass oil to all permissible destinations subject to the following floor and ceiling prices. Export floor prices: 16 rupees per kilo for oil of 76 per cent, citral content with a premium of one rupee per kilo for oil of 80 per cent, citral content. Export ceiling prices: 20 rupees per kilo for oil of 76 per cent, citral content with a premium of one rupee for oil of 80 per cent. citral content. Lemongrass oil with an indeterminate citral content between 76 and 80 per cent, will not be entitled to any premium. London spot prices were marked up ninepence per lb. to 12s.—the same level as shipment. The forward position of LEMON shows a continuing of the firmer trend but spot holders who had bought at lower prices were willing to sell at well under re-placement values. Formosan CITRON-ELLA rose another ninepence per lb. during the week and Chinese oil for forward delivery was threepence dearer. Brazilian PEPPERMINT was again a shade easier. English distilled CLOVE bud oil was one shilling per lb. lower.

English-expressed ALMOND oil continued to rise and supplies were somewhat restricted; the foreign oil, too, has become scarce. Spain is now offering OLIVE oil in drums at a variety of prices. An artificial situation has been created by the fact that the 1-gall, tins are subsidised so that oil in the tins can be bought for about the same price as in bulk. French and Tunisian oils were also quoted but there was none from Morocco. Portugal's 1962-63 olive oil crop is turning out badly and is expected to be only 44 per cent. of the 123 million litres produced in 1961-62. In consequence the country will need some 26 million litres to cover domestic consumption. It was stated that stocks from

the previous crop were low because exports were increased by 50 per cent. to 12 million kilos in the 1961-62 season in order to improve the balance of pay-

BORIC ACID in granular, powder and extra fine powder forms were reduced by £4 per ton on April 8. The crystals are unchanged. Surcharges for smaller quantities have been revised upwards. THEOBROMINE and its salts were reduced, the ALKALOID in 50-kilo lots being down by 7s, 6d, per kilo,

Pharmaceutical Chemicals

AMIDOPYRIN. — Per lb. 16s. 8d. for 5-cwt lots; 1-cwt., 17s. 5d.

AMYLOBARBITONE. — B.P.C. is 76s. per kilo for less than 25-kilo lots and 71s. 6d. over 25 kilos. Sodium is 10s. per kilo

Atropine — Per oz. for 16-oz. lots: xaloid and METHONITRATE, 39s.; and METHONITRATE, MIDE, 38s. 6d.; SULPHATE, 34s. ALKALOID METHYLBROMIDE, (1,181s, for 1-kilo).

Barbitone. — 25-kilo lots of Sodium derivative, 56s. 9d. per kilo.

BORAX.—B.P. grade, 1 ton and upwards: Granular, £54 10s.; crystals, £58; powder, £59; extra fine powder, £60 per ton, all in hessian sacks. Less £1 for paper bags. Commercial from £44 10s. to £51 per ton as to type and packing. Anhydrous borax is £60 per ton in hessian bags or £59 in paper bags; carriage paid in Great Britain. Surcharges for small quantities: tain. Surcharges for small quantities: Less than 1 ton but not less than 10 cwt.. 2s. per cwt.; 5 to 9 cwt., 4s.; 1 to 4 cwt., 8s.

BORIC ACID.—B.P. grade in 1 ton and upwards (per ton): Granular, £84; crystals, £97; powder, £90 10s.; extra-fine powder, £90 10s. per ton in lined hessian bags, carriage paid in Great Britain. Less £1 per ton if supplied in paper bags. Technical from £70 to £80 10s. per ton according to type and packing ing to type and packing.

BRUCINE. - Per oz. ALKALOID is 5s. and SULPHATE, 4s.

BUTOBARBITONE. — B.P.C., 80s. per kilo for 25-kilo lots and over.

CHLORAL HYDRATE. — One-cwt. lots 4s. 1d. per lb.

COCAINE. — 16-oz. lots hydrochloride, 91s. 6d. per oz.; Alkaloid, 101s. per oz. Subject to D.D.A. Regulations.

Cyclobarbitone. — 25 kilos and over: P., 70s. 6d, per kilo. Calcium, 77s. 6d. B.P., 70s. per kilo.

DIGOXIN.—100-gm. lots, 68s. per gm.

Ergometrine.—Maleate, B.P., 144s. per gm. for 20-gm. lots; tartrate, 30s. per gm. for 100-gm. lots.

ERGOTOXINE. — ETHANESULPHONATE, 10-gm. lots, B.P. '32, 60s. per gm., B.P.C. '49, 72s. 6d.

HEXOBARBITONE. — 25-kilo lots or over, 115s. per kilo.

HYOSCINE HYDROBROMIDE.—Per oz. 102s. and per kilo, 3,419s.

ISOPRENALINE SULPHATE.—One-kilo lots, 530s. per kilo; 5-kilos, 510s. per kilo.

METHYL PHENOBARBITONE. -- B.P.C., 78s. per kilo for less than 25-kilo lots,

NARCOTINE.—ALKALOID and HYDROCHLOR-IDE, 5s. 8d. per oz. (200s. kilo) for under 35-oz, lots.

OPIATES. — Home trade prices (per oz.) subject to D.D.A. Regulations:—

		35 oz ov		Uno 35	
CODEINE	1	s.	d.	s.	d.
ALKALOID		54	0	55	0
HYDROCHLORIDE		47	3	48	3
PHOSPHATE]	41	0	42	0
SULPHATE	}	47	3	48	3
MORPHINE	i				
ACETATE]	50	0	51	0
ALKALOID]	61	3	62	3
HYDROCHLORIDE		50	0	51	0
SULPHATE	1	50	0	51	0
TARTRATE		60	ō	61	0
ETHYLMORPHINE			_		
ALKALOID		63	3	64	3
HYDROCHLORIDE		54	ō	55	0
DIAMORPHINE					-
ALKALOID		59	9	60	9
HYDROCHLORIDE		54	9	55	9

Pentobarbitone. — 25-kilo lots and over are 107s. 6d. per kilo.

PETHIDINE HYDROCHLORIDE. — Subject to D.D.A. Regulations, 5-kilo lots, 300s. per kilo.

PHENOBARBITONE. — Spot rate 50-kilo lots, 47s. 6d. per kilo; 5-kilos, 50s. 6d.; 500-gm., 54s. 6d. Sodium salt, 55s. 6d. per kilo for 5-kilo lots.

PHENOL.—Ice crystals in bulk, 1s. 4d. er lb. Liquid, B.P., 1s. 9d. per lb. in 56lb. returnable tins.

PHOLCODINE.—8-oz. lots, 95s. 9d. per oz. (3,377s. per kilo).

PHTHALYL SULPHATHIAZOLE. — Five-kilo lots, 31s. per kilo.

PHYSOSTIGMINE. — ALKALOID, 408s. per oz. (for 4-oz. lots) and 14,110s, per kilo; SALICYLATE, 276s. oz. (9,454s. kilo); SULPHATE, 352s, oz. (12,134s. kilo).

PICROTOXIN.—Per oz. 45s. 6d. (4-oz.). QUINALBARBITONE.—Sodium salt is 110s. per kilo for 25-kilos and over.

STRYCHNINE. — 100-oz. lots; ALKALOID, 11s. per oz,; SULPHATE and HYDROCHLORIDE, 9s. SUCCINYL SULPHATHIAZOLE. — Five-kilo

lots, 38s. 6d. per kilo. 50-kilo lots, 54s. SULPHACETAMIDE. -

per kilo; sodium, 66s. 2d. SULPHADIAZINE.—Five-kilo lots, 65s. per

kilo; 50-kilos, 60s. SULPHADIMIDINE.—50-kilo lots are 40s.

per kilo. Sulphaguanidine.—100-kilo lots, about

19s. 6d. per kilo. SULPHAMETHIZOLE. — Per kilo.—5-kilo

lots, 100s.; 50-kilos, 95s. SULPHANILAMIDE. — 50-kilo lots, 12s. 8d.

per kilo. SULPHAPYRIDINE. — Five-kilo lots, 120s.

SULPHATHIAZOLE. — 100-kilos, 32s. per

kilo; 50 kilos, 33s. TEREBENE. — B.P.C., one-carboy lots, 4s. 5d. per lb.

THEOBROMINE. — ALKALOID in 50-kilos, 31s. per kilo; — CALCIUM SALICYLATE, 43s. 6d. per kilo; and—Sodium Salicylate, 31s. 6d.

d-Tubocurarine chloride. — 100-gm. lots, 60s. per gm.

CARBONATE. — One-cwt. 1s. $11\frac{1}{2}$ d. per lb.; 1-ton, 1s. 8d.

ZINC CHLORIDE. — B.P.C. cake, 7s. per lb.; sticks, 7s. 10d. Technical, 115s. per

ZINC OXIDE. — Two-ton lots B.P. grade, £95 per ton; 1-ton, £96.

ZINC PEROXIDE. — One-cwt. lots of B.P., 5s. 3d. per lb.

ZINC SULPHATE. — B.P., 1-cwt. lots, 1s. 6d. per lb.

Crude Drugs

ACONITE. — Spot: Spanish napellus, 2s. 9d. per lb.

AGAR.—Kobé No. 1, 12s. 3d. per lb, in bond; shipment, 11s. 9d., c.i.f.

Anise. — Chines Star, 185s. per cwt., spot, duty paid; shipment, 152s. 6d., c.i.f. ARROWROOT. — St. Vincent, superfine

sifted, 1s. 6d. per lb., spot.

BALSAMS. — Per lb.: CANADA: Spot, 18s. to 25s. COPAIBA: B.P.C. grade, 9s. 6d., duty paid. PERU: Spot, 8s. 6d. duty paid. Tolu: B.P., from 10s. 6d. to 17s. 6d.

BENZOIN.—Sumatra block, spot £18 10s. to £35 per cwt. as to quality.

Buchu. — Spot, 3s. 10d. per lb.; shipment, 3s. 9d., c.i.f.

Calamus.—Root, 100s. per cwt., spot, 87s. 6d., c.i.f.

CALUMBA ROOT.—Mozambique spot, 85s. per cwt.; 70s., c.i.f.

Capsicums. — East African on stalk, 150s. per cwt.; Ethiopian, 145s.

Cardamoms.—Aleppy greens 8s. 6d. per lb. spot; shipment, 7s. 9d., c.i.f. Seeds, spot, whole, 14s. 6d.; splits, 10s. 6d.

CHILLIES.—Zanzibar, 170s. spot; shipment, 170s. per cwt. Mombasa spot, 220s., shipment, 160s., c.i.f.

CINNAMON QUILLS.—Shipment (c.i.f. lb.) 4 O's, 6s. $8\frac{1}{4}$ d.; single O, 6s. 6 seconds, 5s. $6\frac{1}{4}$ d.; quillings, 4s. 8d.

CLOVES.—Zanzibar spot, 2s. $10\frac{1}{2}$ d. per lb. standard grade; shipment, 2s. $7\frac{1}{2}$ d.,

COLOCYNTH PULP. — Spot and shipment nominal.

ELEMI.--Spot, 1s. 6d. per lb. Shipment, 1s. 1d., c.i.f.

GINGER. — (Per cwt.). African shipment, nominal, Jamaican No. 3 spot, 610s, to 650s. April–May shipment, 555s., c.i.f. Cochin, spot and forward, 205s.

HENNA. — Indian, spot, about 90s. per cwt.; shipment, 75s., c.i.f.

HONEY. — (Per cwt.). Australian light amber, 132s. 6d. to 137s. 6d. and medium amber 130s. to 135s. Argentine, 135s. to 140s.; Jamaican, 115s. to 125s.; Canadian, 165s. to 170s.; Mexican, 127s. 6d. to 132s. 6d.; all ex warehouse.

IPECACUANHA.—(Per lb.). Colombian for shipment. 67s. 6d., c.i.f.; afloat, 69s., c.i.f.; Matto Grosso, 66s. 6d., c.i.f. Costa Rican, 85s, c.i.f., and 87s. 6d., spot, scarce.

JUNIPER BERRIES. — Hungarian, 95s. per cwt.; German, 145s. spot.

Karaya. — No. 1 gum, spot 365s, per cwt.; No. 2, 280s, per cwt.

Kola nuts. — African $5\frac{1}{2}$ d. spot and $4\frac{1}{2}$ d., c.i.f. (per lb.).

Lanolin. — Anhydrous B.P. is from 170s. to 190s. per cwt. in 1-ton lots delivered, free drums.

LINSEED. — Whole, 72s. 6d. per cwt.; crushed, 102s. 6d.

LIQUORICE. — Natural root: Russian, 65s. per cwt.; Anatolian, 57s. 6d.; Persian, 52s. 6d.; Sicilian 1-kilo bundles, 1s. 6d. per lb. Block juice: Anatolian from 200s. per cwt.; Italian stick from 329s. to 470s. per cwt.

Lobelia Herb.—American spot, 6s. 3d. per lb.

Malefern.—Root for shipment quoted at 75s. per cwt., c.i.f.

MENTHOL.—Chinese; spot, 44s. per lb. duty paid: April-May shipment, 38s., c.i.f. Brazilian 19s. to 19s. 6d. in bond; shipment, 18s. to 18s. 6d., c.i.f. Formosan, 28s. 6d. in bond; shipment, 27s. 6d., c.i.f.

NUTMEGS. — West Indian 80's, 6s. 6d. per lb. spot; sound unassorted, 4s. 3d.; defectives, 3s. $4\frac{1}{2}$ d.

Orange Peel. — Spot: Sweet ribbon, 1s. 10d. per lb.; bitter quarters: West Indian, $10\frac{1}{2}$ d.; Spanish, 1s. 4d.; bitter ribbon, 1s. 3d.

PAPAIN. - For shipment: East African No. 1, 29s., c.i.f.

PEPPER.—White Sarawak spot, 3s. 3d. per lb.; shipment, 3s. 1d., c.i.f. Black Sarawak spot, 2s. 5½d.; shipment, 2s. 3½d., c.i.f. Black Malabar, 320s. per cwt. spot; shipment, 262s, 6d., c.i.f.

Podophyllum.—Spot, per cwt.: *Emodi*, 250s.; *Peltatum*, 365s.

Pyrethrum. — Extracts—partially waxed, 25 per cent. pyrethrins, 74s, 6d, to 65s, 6d, per lb.; decolorised dewaxed, 20 per cent., 66s, 6d, to 59s, 4d, per lb,

QUASSIA.—Spot, 57s. 6d. per cwt.

- Spot, 180s, per cwt.; OUILLAIA. shipment, 140s., c.i.f.

RHUBARB. — Supplies of good pinky rounds cleared on the spot; shipment offers scarce.

SAFFRON. — Mancha superior, 180s, per lb. spot.

SEEDS (Per cwt.) ANISE. — Spanish, 277s. 6d., duty paid. CARAWAY.—Dutch, 277s. 6d., duty paid. CARAWAY.—Dutch, 155s., duty paid. CELERY.—Indian spot, 240s.; shipment current crop, 200s.; new crop, 200s.; new crop for June–July, 157s. 6d., c.i.f. CORIANDER. — Moroccan firmer at 62s. 6d., duty paid; April shipment advanced to 57s., c.i.f. CUMIN.—Indian, 165s.; Iranian, 165s., duty paid; shipment Iranian, 135s., c.i.f., quoted. DILL.—Indian, 80s., spot; shipment, 60s., c.i.f. FENNEL.—Indian quoted at 127s. 6d., spot; shipment 122s. 6d., c.i.f. for current spot; shipment 122s, 6d., c.i.f., for current crop; new crop, 127s, 6d., c.i.f. Fenugreek. — Moroccan, 57s, 6d., duty paid; shipment dearer at 47s, 6d., c.i.f. Mustard.—English, 50s. to 70s., according to quality.

SENEGA.—Spot, 14s. 6d. per lb.; shipment, 14s., c.i.f.

SENNA. — (Per lb.). *Tinnevelly* LEAVES, spot: Prime No. 1, 2s. 3d.; prime No. 2, 1s. 9d.; No. 3, f.a.q., 1s. 4d. Pods: handpicked spot scarce at from 3s. 3d. to 3s. 6d., as to quality: manufacturing spot, 2s. 4d. *Alexandria pods*: Manufacturing, spot cleared: forward, 2s. 6d. to 2s. 9d. per lb. ex wharf; hand-picked from 4s. 9d. to 8s. 6d. as to quality.

SHELLAC.—F.O.T.N., 192s. 6d. per cwt.; No. 1, 207s. 6d.; F.O., 225s. to 275s.

SOUILL. — White 80s, per cwt, on the

STRAMONIUM.—Continental LEAVES 85s.

per cwt. spot. STYRAX.—Spot, 22s. per lb.; shipment, 21s., c.i.f.

Tonquin Beans.—Para spot, 5s, 6d, per lb.; shipment, 4s, $10\frac{1}{2}$ d., c.i.f.; Trinidad, 7s, 6d., spot.

Tragacanth. — No. 1 ribbon, £132 10s. to £135 per cwt. No. 2, £125 to £127 10s.

TURMERIC. — Madras finger spot, 180s. per cwt. quoted; shipment April-May, 125s., c.i.f.

Valerian Root. — Spot: East European, 175s. per cwt.; Indian, 180s. Shipment: Continental, 172s. 6d. to 205s. 6d. c.i.f.

Vanillin.—Rates (per lb.) are now: 5-cwt. lots, 21s. 6d.; 1-cwt. 21s. 9d 56-lb., 22s.; small quantities, 22s. 6d.

Waxes. — (Per cwt.): BEES'.—Dar-es-WAXES. — (Per cwt.): BEES.—Dar-es-Salaam, spot 470s. nominal; shipment, 440s., c.i.f. Abyssinian, spot 410s.. in bond; for April—May shipment, 390s., c.i.f. Sudanese, spot, 450s.; shipment, April—May, 390s., c.i.f. Candelilla, spot, 465s.; forward, 460s. landed. Carnauba, fatty grey, spot, 325s., shipment, 310s., c.i.f.; prime yellow, spot, 635s.; shipment, 630s., c.i.f.

WITCH HAZEL LEAVES.—Spot quotations are 2s. 10d. per lb.

Essential and Expressed Oils

Almond. — Sweet, English expressed, 10s. 6d. per lb.; foreign, 6s. 6d.

AMBER.—Rectified on the spot, 1s. 6d. per lb.

BAY. — West Indian about 25s. per lb. on the spot.

BIRCH TAR.—Rectified, 8s. per 1b.

CADE. - Spanish, 2s. 6d. per lb. for

CALAMUS. - Spot, about 56s. per lb.; shipment, 38s., per 1b., c.i.f.

CAMPHOR, WHITE. — Chinese, 2s. 7d. duty paid, per lb.; shipment, 1s. 9d., c.i.f., nominal.

Cananga.—Spot, 27s. per lb.

CEDARWOOD. — Rectified 6s. per 1b. on

CHAMOMILE.—Smalls 640s, per lb.

CINNAMON.—Best English-distilled, 640s.

CINNAMON.—Best English-distilled, 640s, per lb.; other B.P. oils from 22s, per lb. Ceylon leaf, 12s.; Seychelles, 8s., spot.

CITRONELLA. — Ceylon, spot, 9s. 3d.; shipment, 8s. 8d. per lb., c.i.f. Formosan nominally 16s. in bond; April shipment, 15s. 6d., c.i.f.; Chinese, spot cleared; May-June shipment, 14s. 9d., c.i.f.

CLOVE.—Madagascar leaf spot, 7s. 1½d. per lb., duty paid: shipment, 6s. 1¾d., c.i.f. RECTIFIED 87–88 per cent., 12s. Distilled bud-oil, English B.P., 26s. lb. for 1-cwt, lots.

CORIANDER.—B.P. oil, 41s. per lb., spot. CUBEB.—Spot supplies of imported are 85s. per lb.

DILL.—Imported, 33s. per lb., spot, 28-

GERANIUM.—Bourbon, 90s. to 100s. per lb. on the spot.

JUNIPER. — B.P.C. 1949 oil is from 13s. 6d. per lb. JUNIPER WOOD, from 5s.

LAVANDIN.—From 11s. to 12s. 9d. per lb. as to quality.

LAVENDER SPIKE.—Spanish, 12s. 6d. per lb. for original drums.

LEMON.—Spot cold pressed from 21s. per lb.; Sicilian, 37s. 6d. Sicilian for shipment, about 52s. per lb., c.i.f.

LEMONGRASS. - Firmer, spot, 12s. per lb.; shipment, 12s., c.i.f.

LIME.—West Indian distilled 48s, per lb. on the spot.

NUTMEG. — Imported B.P. oil is from 36s. to 76s. per lb. as to source. English distilled, 132s. 6d.

OLIVE.—Spot value of Spanish is 40s. to 40s. 6d. per gall. in tins or bulk; forward, £430-£435 per metric ton, f.o.b. Spain. French and Tunisian oil, £440-£450. All per metric ton in drums c. and f., London. Moroccan, not offering.

PATCHOULI. — Penang is 22s., duty paid and 19s., c.i.f., per lb.

PEPPERMINT. — Arvensis: Chinese spot. 16s. 3d.; shipment, 15s., c.i.f. Brazilian spot, 5s. 10½d. to 6s.; shipment. 5s. 7d., c.i.f. Piperita: Italian, 48s. to 70s., spot. American from 35s. to 38s. 6d. per lb. as to make.

Petitgrain.—Paraguay, 18s. 3d. per lb.. spot; shipment, 17s. 6d., c.i.f.

PIMENTO. — English-distilled berry from 150s, per lb.; imported, 32s, 6d. Rectified leaf, 19s, 6d. per lb.

PINE. — *Pumilionis*, 33s. per lb.; sylvestris, 9s., abietis, 15s.

ROSEMARY.—Spanish genuine is 9s. 3d. per lb. spot.

SASSAFRAS. -Brazilian is from 2s. 6d. per lb., duty paid.

SPEARMINT.—American oil on the spot 24s. per lb.

VETIVERT.—Bourbon spot, 95s. to 105s. per 1b.; shipment, 95s., c.i.f.

YLANG-YLANG. — Best oil quoted about 145s. per lb.

PRINT AND PUBLICITY

PRESS ADVERTISING

CHARNWOOD LABORATORIES (DIVISION OF VANTOREX, LTD.), Morley Street, Loughborough, Leics: Rexall iron and brewers' yeast tablets. In Woman's Realm, Woman's Weekly and Pèople's Friend, commencing May 10.

GOLDEN, LID., Berkeley Square House, Berkeley Square, London, W.1: Ambre Solaire, In Daily Express, Daily Telegraph, Daily Mail, Sunday Times, and Sunday Observer.

STAFFORD-MILLER, LTD., 166 Great North Road, Hatfield, Herts: Amm-i-dent, In Radio Times.

PUBLICATIONS Booklets and Leaflets

GEIGY PHARMACEUTICAL Co., LTD., Wythenshawe, Manchester, 23: "Hygroton 50 mgm." (card).

KODAK, LTD., Kingsway, London: "Kodak Unifix powder" (6-p. leaflet).

STAFFORD-MILLER, LTD., 166 Great North Road, Hatfield, Herts: "Alphosyl lotion, The Story of Psoriasis" (4-p. folder), "The Success of Alphosyl" (3-p. folder).

Price Lists

ARTHUR H. Cox & Co., LTo., Brighton, Sussex: Price list of specialities and packed specialities.

GERHARDT-PENICK, LTD., Purley Way, Croydon, Surrey: TUMS indigestion tablets. In News of the World, The People, Daily Express and Daily Mirror.

CLAY & ABRAHAM (MANUFACTURING), LTD., 2 Upper Duke Street, Liverpool, 1: Susie's perfect cleaner. In The Lady, Homes & Gardens, Home, and The Countryman.

SCHICK INCORPORATED (U.K.), LTD., New Pound, Wisborough Green, Billinghurst, Sussex: Superspeed electric shaver, In Daily Express, Daily Mirror, Radio Times, Daily Mail, Daily Telegraph, T.V. Times and Reader's Digest.



COSMETIC "DISPENSER" UNIT: The Match-Mate range of cosmetic products is set out on a new "dispenser" unit produced by Swandown Cosmetics, Ltd., 191 Latimer Road, London, W.10, for use in conjunction with the "Match-Mate beauty wheel," which guides the purchaser in her choice of cosmetics.

COMMERCIAL TELEVISION

Figures in these columns represent number of appearances of the "spot" during the week.

April 21—27	London	Midland	North	Scotland	Wales	South	N.E.	Anglia Ulster	Westward	Border	Grampian	Eireann	Channel 1s.	W.& N.Wales
4711 eau de Cologne Alka Seltzer Anadin Anne French products Askit Beecham powders Bisodol Bristow's lanolin shampoo Bunty Baby products Christy's lanoline face pack Cuticura Dentosine Dentosine Dentu-creme Dentyme Dinneford's magnesia Eno's fruit salt Izal toilet tissue Izal toilet tissue Kleenex Loxene shampoo Maleans tooth-paste Milk of Magnesia tablets Moorland tablets Nivea creme Phyllosan Poli-grip Rinstead pastilles Rosedale Lano-spray Salvelox Setlers VO5 conditioner shampoo spray Get Set Yeast Vite		1 - 1 - 1 - 1 - 3 3 3 3 3 1 - 2 2 1 1 1 - 2 2 1 1 1 - 2 2 1 1 1 - 2 2 1 1 1 - 2 2 1 1 1 - 2 2 1 1 1 - 2 2 1 1 1 - 2 2 1 1 1 - 2 2 1 1 1 - 2 2 1 1 1 - 2 2 1	2 5 3 1 1 1 4 4 4 4 4 5 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-2 6 -13 3 4 4 2 2 2 2 -1 3 2 3 4 4 1 3 3 3 1 1 2 2	- 5 1 - 3 3 - 2 1 1 - 2 2 - 5 3 2 3 1 2 2 1	2 5 1 — 3 3 — — 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 5 4 3 3 	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 4 4 	5 1 7 3 	2 2 3 3 1 1		5	
reast vite	 ••	3	2 3	2	3	2 -	2	2 2	4	2	2	_	2	4

EXPANSION PLANS

THE Alkali division of Imperial Chemical Industries, Ltd., is spending £3 millions on development schemes in the mid-Cheshire area by the end of 1964, it is announced. £1 million is being spent on introducing the manufacture of soda ash at the Winnington works, Northwich, modification of the nearby Lostock works, and the building of a new vacuum salt plant at Winsford where about £350,000 is being spent on increasing the annual capacity.

AN agreement between Boots Pure Drug Co., Ltd., and Koninklijke Zwavelzuurfabrieken v/h Ketjen N.V., Amsterdam, to form a joint company. Boots-Ketjen, Ltd., for the worldwide sale of potassium permanganate, is announced. On April 1 a revolutionary new plant went into production at Beeston, Nottingham, Output is to be more than doubled under the new arrangement. The best of both British and Dutch processes are said to have been incorporated at Beeston to achieve continuous production which dispenses with manual handling, batching and methods wasteful of time, labour and heat.

COMING EVENTS

Items for inclusion under this heading next week should be sent in time to reach the Editor not later than first post on Wednesday morning.

Tuesday, April 16

NORTH STAFFORDSHIRE BRANCH, PHARMACEUTICAL SOCIETY, North Stafford hotel, Stoke-on-Trent, at 7.45 p.m. Annual meeting.

WEST MIDDLESEX BRANCH, PHARMACEUTICAL SO-CIETY, Ealing town hall, The New Broadway, London, W.5, at 8 p.m. Mr. J. W. Hadgraft (chief pharmacist, Royal Free hospital) on "Pharmacy and Skin Diseases,"

Wednesday, April 17

NORTH-WESTERN BRANCH, INSTITUTION OF CHEMICAL ENGINFERS, Grosvenor museum, Chester, at 7.30 p.m., Mr. K. H. Hardy on "Methods of Improving Productivity in the Organic Chemical Industry."

SOUTH LONDON AND SURREY PHARMACISTS' GOLF-ING SOCIETY, Effingham golf club, Effingham, Leatherhead, Surrey, at 1.30 p.m. Spring meeting.

Thursday, April 18

BLACKPOOL BRANCH, PHARMACEUTICAL SOCIETY, Imperial hotel, Blackpool, at 7.45 p.m. Annual meeting.

EDINBURGH AND SOUTH-EASTERN SCOTTISH BRANCH, PHARMACEUTICAL SOCIETY, 36 York Place, Edinburgh, at 7.45 p.m. Annual meeting.

LIVERPOOL CHEMISTS' ASSOCIATION, Adelphi hotel, Liverpool, at 8 p.m. Mr. J. A. McIvor on "Modern Merchandising."

Manchester Pharmaceutical Association, lecture hall, Literary and Philosophical Society, 36 George Street, Manchester, at 7.45 p.m. Junior branch annual meeting.

SUNDERLAND BRANCH, PHARMACEUTICAL SOCIETY, Roker hotel, Sunderland, at 7.30 p.m. Annual meeting.

WEST HAM ASSOCIATION OF PHARMACISTS and EAST METROPOLITAN BRANCH, PHARMACEUTICAL SOCIETY, Vísit to Smith, Kline & French, Ltd., Welwyn Garden City, Herts.

Friday, April 19

MANCHESTER BRANCH, GUILD OF PUBLIC PHARMA-CISTS, Woolton Hall, Fallowfield, Manchester, 4. Week-end school, Until April 21,

Advance Information

NATIONAL PHARMACEUTICAL UNION; CHEMISTS' DEFENCE ASSOCIATION, LTD.; CHEMISTS' SICKNESS & PROVIDENT SOCIETY, Connaught Rooms, Great Queen Street, London, W.C.2, at 7.30 p.m., on May 1, Annual meeting.

WORLD TRADE

West German Drug Industry. - Exports of pharmaceutical products from West Germany in 1962 rose by "only" 5.6 per cent. to DM711 millions. In 1961 the increase amounted to 13 per cent. Those results are given in the monthly letter of the industry's association. The letter adds that the smaller increase was mainly due to world-wide pressure on prices. "In the face of the keen international competition, the industry's export results can be described as remarkable." Nearly 54 per cent. of all pharmaceutical sales went overseas. North and Central America took goods valued at DM81 millions, Asia, DM150 millions. Sales within Europe amounted to DM328 millions and European Common Market partner countries bought more than European Free Trade Association countries, thus reversing the 1961 position. Britain had the "most resounding success" in her sales of pharmaceuticals to West Germany in 1962, said the Association. Those sales far more than doubled to DM20 millions worth, but purchases from the United States fell to DM27 millions from DM36 millions, previously. Switzerland increased her sales of pharma-ceuticals to West Germany by 11.4 per cent., to DM78 millions worth, and sent more than a third of the country's total imports in that field. Pharmaceutical imports totalled DM221 millions, of which 83 per cent. came from European neighbour countries, against 78 per cent. previously. E.F.T.A. countries, increasing their sales by 23.5 per cent., delivered more than half of West Germany's pharmaceutical imports for the first time. The rising proportion of imports from E.E.C. partner countries amounted to 29 per cent. of the total.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the "Trade Marks Journal," April 3 For soaps (3)

SAVONGENA, 819,672, by Maurice Norton, London, S.W.4.

For preparations for the hair, for use by spraying

PEPITA, 25,453, by Dr. Carl Hahn, K.G., Düsseldorf, Germany. For all goods (3)

BIZI-LIZI, 836,291, by Sterwin, A.G., Zug, Switzerland.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles (not included in other classes), sachets for use in waving the hair, shampoos, soaps and essential oils (3)

STILETTO, TIRAGE, 840,802-03, by Cussons Sons & Co., Ltd., Manchester, 7.

For non-medicated toilet preparations and cosmetic preparations (3)

CURVENE, 842,107, by Petnote, Ltd., Willenhall, Staffs.

For detergents (3) and for paper and paper articles (16)

Device Device with words HIGHLAND PIPER BRAND, 840,795, 840,671, by Superfine Tissues, Ltd., Aberdeen, Scotland. words HIGHLAND

chemical substances prepared for use in medicine and pharmacy (5)

CEANOL, 832,189, by Quinoderm, Ltd., Stockport. Ches.

For preparations and substances, all for forming protective films in the manufacture of artificial dentures (5)

VENAFOIL, 836,455, by Eric Carr Walker, Eastbourne, Sussex.

For dietetic bread (5)

Device with words HEUDEBERT'S SLYM-

BRED, B829,173, by Heudebert Foods Co., Ltd., Alperton, Wembley, Middlesex, For blood plasma expanders, being pharmaceu-

tical preparations (5)

HAEMACCEL, 836,664, by A.G., Marburg/Lahn, Germany. 836,664 by Behringwerke.

For pharmaceutical preparations and substances

INFLAMASE, NEGRAM, 837,347-48, by Sterwin, A.G., Zug, Switzerland.

For pharmaceutical preparations containing antacids, for human use for the treatment of hyperacidity (5)

ACTALACT, 837,618, by Sterwin, A.G., Zug, Switzerland.

For pharmaceutical preparations and substances, all for use in the inhibition and treatment of bronchial ailments (5)

COFANIL, 837,621, by Sterwin, A.G., Zug, Switzerland.

For vitamin preparations for use in the prevention and treatment of colds and similar infections

TRI-VIT, B838,990, by Co-operative Wholesale Society, Ltd., Manchester, Lancs.

For foot ointment (5)

GIPSYFOOT, 839,466, by Ruby Clarke, Eastbourne, Sussex.

For all goods (5)

OLMISIN, 840,041, by C. H. Boehringer Sohn, Ingelheim-on-Rhine 22b, Germany. TRON, 841,789, by Miles Laboratories, Inc., Elkhart, Indiana, U.S.A. FINDUS, 841,941, by Produits Findus, S.A., Vevey Vaud, Switzerland

For pharmaceutical and sanitary substances; infants' foods; inedical and surgical plasters; material prepared for bandaging; material for stopping teeth, dental wax; disinfectants; preparations for killing weeds and destroying vermin (5) and for surgical, medical and dental instruments and apparatus (10)

BERETUN, 842,664-65, by Hildreth and Co.,

Ltd., Birmingham, 30.

For pharmaceutical preparations and products (5) ZACTIPAR, 843,009, by American Home Products Corporation, New York 17, U.S.A.

For veterinary preparations (5)
HYPOLIN, 843,634, by Walter Gregory & Co., Ltd., Wellington, Somerset.

For photographic, cinematographic, optical and

teaching apparatus and instruments (9) DALCO, 825,647, by Nederlandsche Fotogra-fische Industrie, N.V., Soest, Holland.

For photographic film cassettes (9)

DUEX, 834,072, by Kodak, Ltd., London, W.C.2.

For photographic and cinematographic apparatus and parts and fittings; slides, photographic transparencies, etc. (9)

POPEYE, 838,907, by Hearst Corporation, New York, U.S.A.

For photographic cameras and parts (9)
ASTRAL, 841,658, ULTIMA, 841,661, by B,
Bennett & Sons, Ltd., London, W.1.

CONTEMPORARY THEMES

Subjects of contributions in current medical and technical periodicals

CARBON TETRACHLORIDE intoxication. ACUTE J. Amer. med. Ass., March 23.

SEPARATION OF PEPSINS from human gastric juice. J. Amer. med. Ass., March 23.

INSULIN-INDUCED stimulation of gastric acid secretion. J. Amer. med. Ass., March 23.

UROKINASE. In-vitro and in-vivo studies of a preparation of, Brit, med. J., April 6, AUTOMATION and REPETITIVE WORK, Lancet.

WORK. April 6.

TETANUS. Rôle of serum therapy in, Lancet, April 6.

INTRAVENOUS INFUSION OF FLUIDS at a constant rate. An apparatus for the. Lancet, April 6. THIN-LAYER CHROMATOGRAPHY: a new tool for chemists. New Scientist, April 4.

TROLENE (dow-ct-57) in the control of oxwarbles (hypoderma lineatum), Vet, Rec., April 6. Valine, Alleviation of 1-aminocyclopentane-1-

carboxylic acid toxicity by. Nature, April 6. STRUCTURE OF BILIRUBIN. Nature, April 6.

INFLUENZA VIRUS. A simple method for purification of, Nature, April 6.

PATENTS

COMPLETE SPECIFICATIONS ACCEPTED From the "Official Journal (Patents)," April 3

Biocidal compositions, and their use, J. R. Geigy, A.G. 926,455.

Therapeutically active benzyl hydrazinium compounds. Wellcome Foundation, Ltd. 926,249.

Pharmaceutical compositions comprising an oxi-diazololone derivative and sulphur-containing antileprotic. Ed. Geistlich Sohne, A.G. 925,908. Antitubercular pharmaceutical compositions, Ed. Geistlich Sohne, A.G. 925,911.

Quaternary ammonium compounds and the preparation Wellcome thercof. Foundation, Ltd. 925,988.

Processes for producing halogenodiphenyl-sulphones. Philips Gloeilampenfabrieken, N.V. 926,291,

Preparation of dipyridylium quaternary salts, Im-

perial Chemical Industries, Ltd. 926,326, Processes for the manufacture of 1-bromo-1-chloro-2:2:2-trifluoroethane. Imperial Chemical Industries, Ltd. 925.909.

Antifungal phytoactin and process for preparing same. Pabst Brewing Co. 926-252-53.

roduction of 7-chlor Cyanamid Co. 926,161. 7-chlortetracycline.

Halogen-pregnenes and a process for their manufacture, CIBA, Ltd. 926,472.

1,2-methylene- and 1,2-diazo-methylene-3-keto-steroids and a process for their manufacture, Schering, A.G. 926,372.

Esters of natural and synthetic estrogens, Leo, A.B. 926,456.

2-cyano steroids and process for preparation. American Cyanamid Co. 926,040.

Process for the distillation of chemical compounds which decompose under normal distillation conditions, P, A, Schreiber, 926,337.

Organo-tin compounds for combating micro-

organisms, Philips' Gloeilampenfabrieken, N.V. 926,282.

Phosphonic and thiophosphonic acid esters, Farbenfabriken Bayer, A.G. 926,234, Dithiocarbamoyl derivatives and fungicidal com-

positions containing them. Aggrunol Chemische Fabricken, N.V. 926,143.

Absorbent product Johnson & Johnson, 926,424. Double-lipstick container, Kollisch Geb. 925,928. Glue applying device for paper-tube-winding machines, A. Brodbeck, 926,468.

Hardening photographic silver halide materials, Kodak, Ltd. 926,313, Rank-

Image control method and apparatus. Xcrox, Ltd. 926,361. Photographic material, A. Abbey (Kalvar Cor-

poration), 925,992, Photographic transparencies and prints, Kodak,

Ltd. 926,284. Photographic colour image transfer General Aniline & Film Corporation, 926,462,

Microfilm cameras. Photo Copic, G.m.b.H. 926,416, 926,395. Material which can be used to provide an anti-

fading layer for colour photographic images, 926,454.

Photographic camera, Agfa, A.G. 926,258. British patent specifications relating to the above will be obtainable (price 4s, 6d, each) from the Patent Office, 23 Southampton Buildings, Chancery lane, London, W.C.2, from May 15, 1963.

WILLS

MR. G. G. GIBSON, M.P.S., 12 Hale Gardens, Acton, London, W.3, left £10,012 (£9,720 net).

Mr. G. Hughes, M.P.S., 26 High Street Ffestiniog, Merioneths, left £9,143 Blaenau. (£1,014 net).

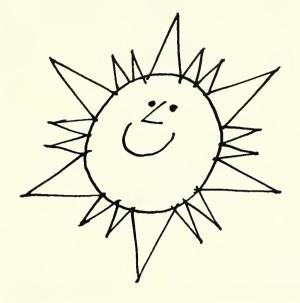
MR. D. Scott, M.P.S., Netherknowe, Ancrum, Jedburgh, Roxburghshire, left personal estate in England and Scotland valued at £18,357.

MR. R. R. SKIDMORE, 5 Mayfield Drive, Exmouth, Devon, who qualified as a chemist and druggist in 1914, left £16,838 (£16,739 net).

MR. R. Shuttleworth, M.P.S., 24 Hatherley Avenue, Great Crosby, Liverpool, 23, left £4,175

(£3,048 net).

MR. E. L. SLADE, M.P.S., 3 Beresford Avenue, Tolworth, Surbiton, Surrey, left £2,954 (£2,914





= £:s:d

Because: Alka-Seltzer sales always sizzle in the summer

Therefore: Your Alka-Seltzer profits always soar in summer, too

Conclusion: Order extra Alka-Seltzer stocks now

There's nothing like

Alka-Seltzer

for profit!



I963

SUMMER SPECIALS FOR

DETTOL

ONE - MORE consumer advertising than ever before on TV and press

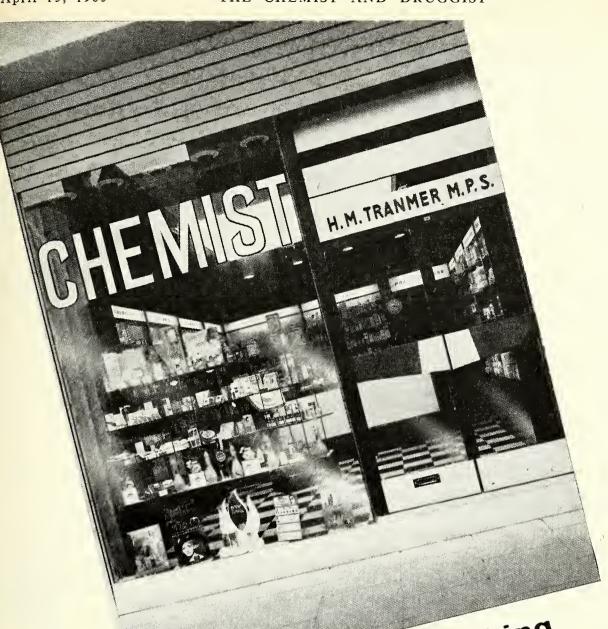




summer bonus

Ask our representative NOW

RECKITT & SONS LIMITED, HULL AND LONDON



are you hiding something

are you hiding something

Good service is a sign of good character. Character

The right design.

The right design.

The right design.

The customers.

The customers.

The customers.

The customers.

The customer to the attracts friends your best friends the customer to the attracts of Old Street are experts at finding the right.

Myers of Old Street are experts at finding the customer.

The provided in individual design.

The customer to the design that brings the customer.

The customer to the customer that brings the customer.

The provided in individual design.

The customer to the customer that brings the customer.

The provided in individual design.

The customer to the customer to the customer.

The provided in individual design.

The customer to the customer to the customer to the customer.

The provided in individual design.

The customer to the c



* Attention all CHEMISTS in SOUTH WALES

We take pleasure in advising you that the margo's range of good quality but inexpensive Toilet Preparations is now readily available from:

FRANCIS NEWBERY & SONS LTD.

Taffs Mead Embankment, Cardiff

Tel.: Cardiff 37631

* Attention all CHEMISTS in DEVON & CORNWALL

We take pleasure in advising you that the margo's range of good quality but inexpensive Toilet Preparations is now readily available from:

MAY, ROBERTS & CO. LTD.

George Place, Stonehouse, Plymouth

Tel.: Plymouth 60356/7/8

who will be pleased to deal with your orders and enquiries

margo's 'value-for-money' Toiletries mean

HIGHER PROFITS — LOWER COSTS — PROVEN FAST SELLERS

Some examples of margo's products:—	Your Cost (inc. P.T.)	Your Profit on EACH Sale
1/0d. HAIR LACQUER SACHET REFILLS (Perfumed) 2/4d. TONIC HAIR CREAM (giant jar) 2/9d. GIANT SIZE TALCUM POWDER 2/0d. LARGE BABY POWDER		5½d. 9¼d. 10½d.
2/3d. ROLL-ON DEODORANT (French Perfumed)	18/9d. per doz.	8 1 d.
1/6d. EGG AND LANOLIN SHAMPOO (4 oz. Bottle)	12/6d. per doz.	
7d. BUBBLE BATH SACHET (French Perfumed) 3/11d. AEROSOL HAIR LACQUER	$4/4\frac{1}{2}d$. per doz. $34/4\frac{1}{2}d$. per doz.	

Manufacturers:

Sidney Margolis Ltd., Margo House, Hemp Row, London S.E.17

RODney: 7461/2/3

ESTABLISHED 1793

ATKINSONEBARKERS INFANTS' PRESERVATIVE

The Infants' Medicine
of 150 years' standing
For teething and digestive troubles

ROBERT BARKER & SON LITE

5 GLISSON ROAD, CAMBRIDGE Tel: Cambridge 54049

MAUND & BERG

For Pharmacy fittings, complete installations, or individual items

PRICE LIST CD4 ON REQUEST

175-9 OLD STREET : LONDON E.C.I



BURROUGH'S

ABSOLUTE ALCOHOL

JAMES BURROUGH LTD., 1 HUTTON RD., LONDON S.E.11

BOULES QUIES

Ear Plugs

COLLYRE BLEU

Laiter

Available from your local wholesaler
Further information etc. can be obtained from:

DALES PHARMACEUTICALS LTD.

(Sole distributors in the U.K.)

Power Road London W.4 (CHI 1441) · Steeton Keighley Yorks (Steeton 3222)

INDEX TO ADVERTISERS

Abbott Laboratories, LtdInterleaved Edit., 403	Illingworth, E., & Co. (Bradford), Ltd
Allen, Stafford, & Son, Ltd. 9 Ayrton, Saunders & Co., Ltd. 22	
	Macarthys, Ltd
Barker, Robert, & Son, Ltd 4	Macfarlan Smith, LtdCover ii
B.B.C. Publications—Radio Times	Margolis, S., Ltd 4
Beatson, Clark & Co., Ltd	Maund & Berg, Ltd
Beecham Research Laboratories, Ltd	Meggeson & Co., LtdPrice List Supp Page 2
Boots Pure Drug Co., Ltd 11	Miles Laboratories, Ltd.
Burrough, James, Ltd 4	Monil, Ltd
Burroughs Wellcome & CoPrice List Supp., Page 1	Myers of Old Street
Charnwood LaboratoriesInterleaved Edit., 20 Cox, Arthur H., & Co., Ltd	National Cash Register Co., Ltd., The
	Phillips, Scott & Turner Co., The
Dales Pharmaceuticals, Ltd 4	Products of Poland—CIECH
Daniel, Richard, & Son, Ltd	Progress Shaving Brushes—Vulfix
Denver Laboratories, Ltd 8	
	Reckitt & Sons (Dettol)
Edge, William, & Sons, Ltd	Richards & Appleby, Ltd 6
	Robinson & Sons, Ltd. (Paddi)
Fleetway Manufacturing Co., LtdCover iii	Rochdale Metal Products, Ltd 26
Franks, Alfred, & Bartlett Co., Ltd	
Fryer & Co. (Nelson), Ltd	Searle, G. D., & Co., Ltd
	Silber, J. J., Ltd
Gevaert, Ltd	Spalton & Jennings, Ltd Interleaved Edit., 18, 19
Glaxo Laboratories, LtdInterleaved Edit., 404	
Grahams Medical Products, Ltd	Unichem, LtdCover iv
Holloway, E. R., Sales, Ltd.—Barnet Combs 12	Vitamins, Ltd 16
Hurtley, F., & Son, Ltd 7	
Hygienic Drinking Straws Co., Ltd	Zeal, G. H., Ltd



ANNOUNCEMENT:

New distributor for Schick, Allcock, Lanolin Plus

Note our name—Richards and Appleby.* It's new. Our formation was announced last week. Why is it worth noting? Because we are one of the few *independent* distributors operating nation-wide in the toiletries and pharmaceutical field. And because we will be working with you in marketing the following products.

- Schick Razors and Blades: sole U.K. agent for all products
- Allcock: Nailoid, Scan
- Lanolin Plus: beauty preparations including Colour Plus

We will be calling on you soon, and look forward to doing business with you.

* Mr. V. Richards is well-known as Managing Director of Allcock Products Ltd. and Mr. T. R. Appleby was formerly Managing Director of J. C. Gambles & Co. Ltd.

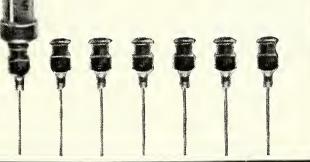
RICHARDS & APPLEBY LTD.

York House, Westminster Bridge Road, SE1 ('Phone WATerloo 4679)



THESE

You can recommend a MACROM Syringe Case with confidence because it:



- Retail Price 17/-Trade Price 12/9 From your usual wholesaler or from:
- MACARTHYS LTD.

Macrom House, Seymer Road, Romford Telephone: ROmford 46021

- * holds a lcc or l·5cc or 2cc syringe capacity of any make or design.
- * holds six needles of any make or design.
- is completely spirit proof.
- is styled in a modern manner.is unbreakable.







COVERMARK is a tinted, neutral, opaque, hypoallergenic cream with a non-irritating base. It is WATERPROOF and sunproof and the consistency is such that it will not run or rub off; cracking or a mask-like appearance is prevented. The illusion of a beautiful skin and complexion is so perfect,

when COVERMARK is properly applied, that most patients are enabled to enter business and undertake professional roles which would otherwise be closed to them.

COVERMARK has been successfully used by the medical profession for disguising massive birthmarks and postoperative scars.

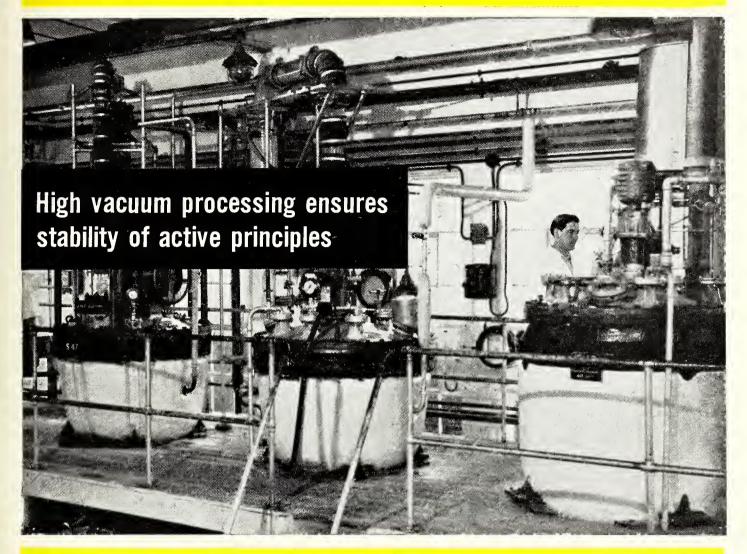
The above unretouched photographs show patient aged 54 who had been extremely self-conscious, unhappy and emotionally disturbed throughout adolescence and young womanhood. Has used COVERMARK daily for 29 years and is gainfully employed as a cosmetic demonstrator, with infectious personality, poise and energy. She meets the public daily and travels extensively.

Supplies of

COVERMARK

are available from MARTINDALES or direct from DENVER LABORATORIES.





Stafford Allen Stafford Blue S



Liquid, solid, powdered and granulated drug extracts are produced in quantity by StaffordAllenS under the most ideal conditions. Stringent analytical control ensures the consistent high quality for which StaffordAllenS are famous.

For samples and quotations, write to or telephone:

STAFFORD ALLEN & SONS LTD., Wharf Road, London, N.1.

Phone: CLErkenwell 1000



'LOLITA' sun glasses

Lolita sun glasses will be a big, big selling line to the vast teenage market this season. The demand has already been created by the immense publicity given to them in the sensational and widely distributed film—'LOLITA.'

Lolita sun glasses will be heavily advertised in the Teenage magazines.



BE FULLY STOCKED.
BIG PROFITS WILL
BE YOURS IF YOU
LINK UP WITH
SUCCESSFUL PROMOTION. SHOWCARD
MATERIAL FOR
POINT OF SALE DISPLAY IS AVAILABLE
TO YOU.



EFFECTIVE · PALATABLE

Dijex Liquid and Tablets are specific antacids exerting a prompt and sustained effect. They contain no sedatives or antispasmodics. Dijex Tablets and Liquid are smooth, palatable and are not nauseating. Both are equally effective for either long- or short-term antacid therapy.

DIJEX LIQUID — Magnesium hydroxide 1.6% aluminium hydroxide gel 98%. Bottles of 8 fl. oz. Retail price 2/9d inc. P. Tax. Trade price 18/4d per doz. (P. Tax extra) (trade discount is more than 33\frac{1}{3}% from the tax free price).

DIJEX TABLETS — Aluminium hydroxide-magnesium carbonate co-dried gel, 400 mg. in a dextrose and milk-solids base. 30 individually wrapped tablets. Retail price 2/9d inc. P. Tax. Trade price 18/4d per doz. (P. Tax extra) (trade discount is more than 33\frac{1}{3}\% from the tax free price).

MAKE SURE YOUR STOCKS ARE ADEQUATE TO MEET INCREASING DEMAND.



ORDER FROM YOUR USUAL WHOLESALER

or from WHOLESALE DIVISION, BOOTS PURE DRUG CO. LTD., STATION STREET, NOTTINGHAM. (Tel: 56111) and 71 Fleet Street, London, E.C.4. (Tel: FLEet Street 0111) and Motherwell Street, Airdrie. (Tel: Airdrie 2491)







make comb profits without actually trying with NEW

Barnet Comb Bars

Barnet combs sell on sight from these new self-service dispensers. Showing a range of combs in a mere few inches, each is ready packed and clearly priced, and most types GUARANTEED. Choose from eleven cabinets to suit your own business. REFILLS SHOW EXTRA PROFIT. Packed dozens from your wholesaler.



ORDER FROM YOUR WHOLESALER NOW:

E. R. HOLLOWAY SALES LTD.

BESSEMER RD., WELWYN GARDEN CITY. TEL: WEL GAR 21111



ORBENIN

REGD.

— the only oral penicillin in the U.K. effective against resistant staphylococci, now available as



Beecham Research Laboratories
Limited are pleased to announce
the introduction of Orbenin Syrup.
Bactericidal to resistant
staphylococci and other Grampositive organisms, this preparation
will prove extremely valuable to the
very young, elderly and other
patients for whom a liquid
preparation is to be preferred
to capsules.

Orbenin Syrup is supplied as a powder for preparing 60 ml. of pleasantly flavoured syrup.
When dispensed each 5 ml. contains 125 mg. cloxacillin (as sodium salt).

Pack 60 ml. bottle
Retail 26/3
Trade (basic N.H.S.) 17/6

Orbenin is also available as Capsules (250 mg.) and Injection (250 mg. vial)



Orbenin (Sodium cloxacillin) is a product of British research at

BEECHAM RESEARCH LABORATORIES LIMITED

Brentford, England. Telephone ISLeworth 4111.



Halina 35X

- * All metal precision 35 mm.
- ★ f/3.5/45 mm. colour corrected lens.
- ★ Synchronised shutter up to 1/200th sec.

★ Coupled film Transport and exposure counter. FOR BLACK/WHITE COLOUR

Ever Ready case £1/8/1

£7-13-3

Halina

35 mm. TABLE VIEWER

- ★ The extra large, precision ground twin optically polished lenses are made from the world-famous Chance Pilkington Optical Glass giving perfectenlargements
- ★ Lenses can be taken out for cleaning purposes.

This viewer can now be converted into a mains operated viewer by adding the AMBASSADOR MAINS BASE 19/9 extra





Halina A1

TWO CAMERAS IN ONE

 ★ TWO CA
 ★ All metal.
 ★ 2½ × 2½ and 21 × 21 and 35 mm. on 120 film.

f/3.5/80 mm. colour corrected lens. Synchronised shutter speeded up to I/Iooth sec.

★ Coupled front lens focusing.

Leather Ever Ready case £1/19/6



Halina

VALUE IN 35 mm. CAMERAS BEST

★ Three apertures 8-11-16. ★ Bulb and instantaneous shutter.

* ALL METAL with satin chrome/ leatherette finish.

★ Synchronised for flash.
★ Double exposure prevention.

Ever Ready Case £1/8/1



Halina **VICEROY**

- * TWO CAMERAS IN ONE
- ★ All metal.
- ★ 2½×2½and 35 mm. on 120 film.
- * Double meniscus f/8 lens.
- ★ Actual size ground glass reflex viewfinder.

* Synchronised for flash.

Bver Ready Case 18/-

Halina 150 2"x2" STILL PROJECTOR

f/3.5/80 mm. hard-coated colour rected lens.

Double condensers.
Helical focusing. All metal.
Heat absorbing filter. Accepts all 2"×2" slides.

Can be converted to 300 watt projector in a few minutes by fitting the HALINA allmetal Fanbase £5/5/0

150 watt lamp 21/9. Carrying case 25/-



Halina 6.

TWO-IN-ONE CAMERA
2½"×2½" or 1½×1½
ALL METAL.

- ALL METAL.
 Achromatic lens f/8.
 Front lens focusing.
 Apertures 8-11-16.
 Double exposure prevention.
 Synchronised for flash (bulbs).



19-6

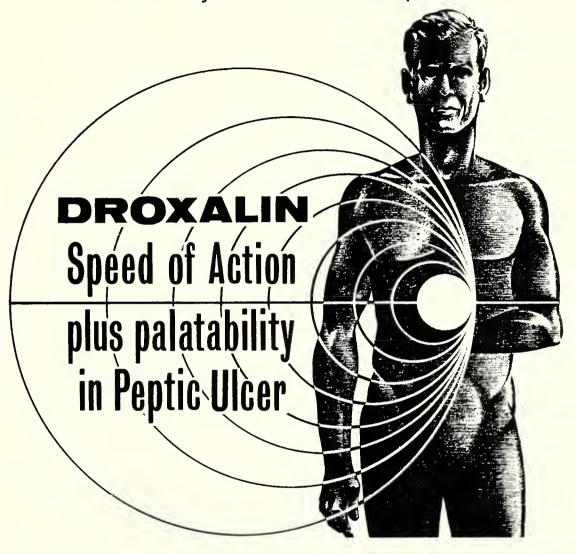
Ever Ready Case £1/9/11 detachable back



J. SILBER LTD., 11 Northburgh Street, London, E.C.1 Telephone: CLErkenwell 8031 (10 lines)

PHARMACISTS! DISPLAY DROXALIN NOW

Tie-up with the promotion now under way and secure extra profits



AND FOR
THE RELIEF OF
HYPERACIDITY
DYSPEPSIA AND
INDIGESTION
OF PREGNANCY

New, heavy Droxalin Medical Advertising and promotions to Doctors mean more Droxalin prescriptions. This in turn will produce greater counter sales from repeat business by satisfied patients.

Droxalin's unique efficacy in all forms of hyperacidity allied to superior palatability is winning this Acid Adsorbent more friends every day.

Display Droxalin on your counter and gain extra profit from the Acid Adsorbent tablet that Doctors prescribe.



Acid Adsorbent Tablets

ACTIVE INGREDIENTS: Dried Aluminium Hydroxide Gel. B.P. 162 mg. Magnesium Trisilicate B.P. 162 mg. PACKING & PRICE: Cartons of 30, 3/- retail and dispensing packs of 180.

THE PHILLIPS, SCOTT & TURNER COMPANY . SURBITON . SURREY

HERE IN Arcancil from France



(Only measures $13\frac{1}{2}$ " wide x 8" deep x $14\frac{1}{2}$ " high)

The Arcancil dispenser supplied with any order of £8 or over. The Showcard supplied with any orders below £8.

From the country where beauty matters—their finest beauty preparations for the eyes.

Let these NEW EYE-CATCHING SOLE DISTRIBUTORS: SPALTON & JENNINGS, LTD.

BRITAIN from Italy



From the country of brilliant colour—a wonderful choice of vibrant shades in the long lasting nail enamel with the special nail strengthener.

DISPENSERS SELL FOR YOU
58 GOUGH STREET, LONDON, W.C.1. TERminus 7183.

Springtime! Yeast time! Bonus time!

NEW Advertising, Display, Bonus terms to promote



IRON & BREWERS' YEAST TABLETS



SPRING ADVERTISING IN TOP WOMEN'S MAGAZINES

"Woman's Realm"
"Woman's Weekly"
"People's Friend"

BIG SPACES starting May 10 4 weeks away



NEW Window, Shelf, Counter Tie-in Displays Aids to spark your Spring Sales



SPRING BONUS PARCEL

12 x 2/- SIZE FREE

(A straight 24|- profit)

48 x 2/- SIZE 24 x 3/6 SIZE

£4.8.0. PROFIT ON BONUS PARCEL Over 10d. profit on 2/- pack.

CHEMIST

QUALITY

Rexall

CHEMISTS

ONLY

Following the successful Special Offer of November/December

the manufacturers of

PADDI-pads

—the softest and best disposable nappies—have pleasure in announcing a further

SPECIAL OFFER

Supported by national advertising in the Daily
Mirror and specialised journals

From Monday, April 22nd, until Saturday, May 25th, "Triple Packs" of PADDI-pads will again be offered at only 4/10—a saving of 5d.

Mothers will again buy 3 packets at a time and so

INCREASE YOUR TURNOVER

Trade Price 44/- per dozen "Triple-Packs"

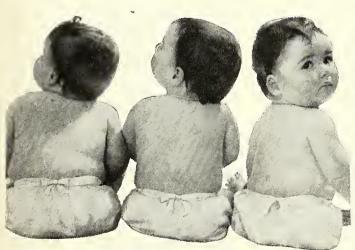
Selling Price 4/10 per "Triple Pack" (30 pads)

Subject to the usual terms and quantity discounts

YOUR MONETARY MARGIN REMAINS THE SAME

Take advantage of this Special Offer—Stock and display these "Triple-Packs" and

SELL MORE PADDI-pads



ROBINSON & SONS LTD - WHEAT BRIDGE MILLS - CHESTERFIELD





AYRTON, SAUNDERS

LIVERPOOL · PRESTATYN · DUBLIN

LAZITAN—the modern prelude to attractive exposure

LAZITAN—for the easy, lazy, overnight or 3-hour tan

LAZITAN— the Pharmacists' best line, for sure!

Show LAZITAN . . . presented in a stylish three-colour show outer. Advise LAZITAN . . . tell purchasers to follow the directions carefully and build up their tan to the desired shade. Advice is a good gimmick for the private man. The supermarket cannot give it . . . he can.

During April, Bonus terms will operate, which will enable you to

,.....

"DOUBLE YOUR MONEY"

Cost 30'- doz. (Tax 25%) Retail 5/2 large tube

13 to the dozen on 1 gross lots or 14 to the dozen on 2 gross lots.

In the battle against cross-infection

GRAHAMS disposable sterilised syringe

Precision-moulded barrel of DIAKON: selected for strength, transparency, and low solubility.

Colours of heat-engraved barrel calibration and plunger chosen for optimum contrast and legibility. Syringes

2, 5 and 10-ml sizes, available with or without Luer-fitting needles. Each syringe individually packed and sterilised. Cartons contain 100 units.

Needles

Fine-ground stainless steel needles, of standard sizes in greatest demand. 100 needles of one size in a carton, each needle in protective hood, sterilised and hermetically sealed in attachment to a foil strip.

GMP competitive prices make the expense and insecurity of autoclaving, boiling, and other laborious methods of sterilising not worth while. Available from our authorised distributors. A list of these distributors will be sent on request.

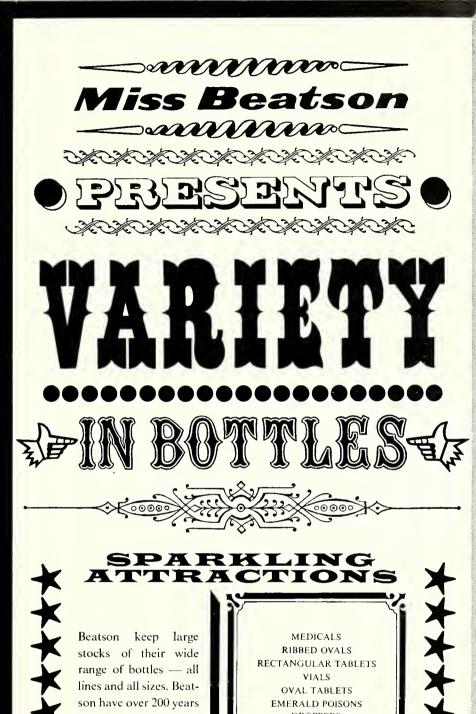
Always new . . . sterile . . . inexpensive



GRAHAMS MEDICAL PRODUCTS LTD.

St. Jude Works, Westmoor Street, London S.E.7 Tel: GREenwich 6221/4 Telegrams: GRAMED, LONDON







Beatson keep large stocks of their wide range of bottles — all lines and all sizes. Beatson have over 200 years experience in serving the Chemist and can be relied upon for uniform high quality at reasonable prices. Ask your wholesaler for Beatson bottles!

MEDICALS
RIBBED OVALS
RECTANGULAR TABLETS
VIALS
OVAL TABLETS
EMERALD POISONS
DROPPERS
EMULSIONS
JARS
PANELS
OLIVE OILS
TOILETS
PLAIN WINCHESTERS
POWDERS

BEATSON, CLARK & CO LTD ROTHERHAM YORKS

TELEPHONE: ROTHERHAM 3188

Glass Bottle Manafacturers since 1751



Est. 1888

CLINICAL THERMOMETERS

G. H. ZEAL LTD. remind customers that all

British Standard Clinical Thermometers are being supplied in accordance with the 1961 edition of B.S. 691*

Furthermore the B.S.I. Kite Mark an additional guarantee of quality and accuracy, is engraved on all **ZEAL** British Standard Clinical Thermometers **AT NO EXTRA GOST**





The usual comprehensive range of Oral, Rectal, Sub-normal and Skin Thermometers is available. * Explanatory Pamphlet available on request.

OBTAINABLE FROM ALL LEADING WHOLESALERS

G. H. ZEAL LIMITED LOMBARD ROAD · MORDEN ROAD

Tel.: LIBERTY 2283 (4 lines) Grams: Zealdom Souphone London. MERTON · LONDON S·W·19.



ETHICALS Picha ETHICALS ETHICALS

A prompt delivery service from our nearest depot

* DERBY PHONE Derby 40671

* GRASSMOOR PHONE Holmewood 481

* ASHTON PHONE Ashton 5161

Conovid-E and Conovid NEW WALLET PACKS



This attractive wallet-style pack for CONOVID-E... comprising a month's treatment of 20 foil-wrapped tablets for oral contraception... will replace the present bottle pack. CONOVID will be similarly packed.

The new wallet will be supplied in unit-packs of three and six wallets.

Your wholesaler will shortly be in a position to supply these new packs. Retail prices for CONOVID-E and CONOVID remain unchanged. The new wallet packs will be available as follows:

CONOVID-E

Trade Price

CONOVID

Trade Price

Unit-pack of 3 wallets

20/-

Unit-pack of 3 wallets

34/-

Unit-pack of 6 wallets

38/10d.

Unit-pack of 6 wallets

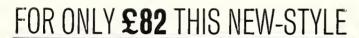
66/2

Retail prices of single wallets: CONOVID-E 10/- CONOVID 17/-

SEARLE

Research in the Service of Medicine





National SALES REGISTER & ADDING LISTER



THE National COUNTA Matic

THE NATIONAL CASH REGISTER COMPANY LTD 206-216 MARYLEBONE ROAD LONDON NW1 · PAD 7070



STEEL SHELVING HEAVY GAUGE

FREE delivery within 14 days, N. Scotland, Ireland, I.O.M. 10% extra

71" high × 34" wide, 12" deep with 6 shelves as illustrated, C.W.O. or C.O.D.

Each shelf will hold over 3 cwt. Shelves adjustable every 2". Stove enamelled dark green. White enamel units 50% extra.

9-1	leight 71" 71" 71" 85" 85"	Width 34" 34" 34" 34"	Depth 9" 12" 15" 12"	Shelves 6 6 6	Price 58/- 60/- 69/- 68/-	3 or more \$67- \$8/- 67/- 66/-	Shelves 7/- 8/- 9/6 8/-	
	85"	42"	12"	6	86/-	84/-	11/-	

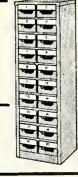
HANDY DRAWER UNIT

42" high, 13" wide, 12" deep. 20 DRAWERS: 5" wide, 3" high, 111" long. Stove enamelled dark green. Direct from manufacturers. Write now for list of other sizes.

£7.15.0

ite sizes.

Buy direct from the manufacturers.
ROCHDALE METAL PRODUCTS
Dept. C.D., Shawclough Works, Waterfoot,
Rossendale, Lancs, ROSsendale 2450
Contractors to H.M. Government and United
Kingdom Atomic Energy Authority
EXPORTERS OF STEEL SHELVING





offers the following PHARMACEUTICAL PRODUCTS

ANTIBIOTICS
SULPHONAMIDES
SALICYLATES
BISMUTH SALTS
PREDNISONE
AMINOPHENAZONE
PHENACETIN
INSULIN

Samples, pamphlets and detailed offers available on request

CIECH

Import and Export of Chemicals Ltd.,
1, 12, Jasna Street, Warszawa,
Poland
P.O.B.271 Cables: CIECH WARSZAWA

Full particulars from our Agents:
Anglo-Dal Ltd., Chesterfield House,
Bloomsbury Way, London W.C.I

Cables: Anglo-Dal, London Phone: HOLBORN 4366

We invite you to visit our stand at the

XXXIInd POZNAN INTERNATIONAL FAIR, 9 - 23 June, 1963

POZNAN — Fair of 5 Continents!





Sweetheart DRINKING STRAWS

FLEX-STRAW
BENDS TO ANY ANGLE

Standard Drinking Straws—packs of 50 now available in the new SELF-SERVICE DISPLAY TRAY.

Self-Service Display Tray holds handy home packs of 25 Flex-Straws, A BOON to invalids at home. Children love them,

Both packs, in colours of red and blue, are designed for quick self-service sales. Your customers can see the straws at a glance in these attractive "window" packs. They occupy MINIMUM SPACE—but make MAXIMUM SALES and MAXIMUM PROFITS.



TRY THE NEW TALL "SWEETHEARTS"—
10½"—for LONG DRINKS, Available in handy
quarter gross cartons.

For those who like their "SWEETHEARTS" shorter... there are the 8½" straws in packs of 100, as well as the 8½" "Mother Goose Straws" in the colourful "window" pack (kiddies love 'em).

These are just a few of the SWEETHEART range, TALL, SHORT, STRAIGHT; also the FLEX-STRAW—the ONLY straw DESIGNED TO BEND AT ANY ANGLE, Can be used safely in hot and cold beverages,

HYGIENIC DRINKING STRAWS CO. LTD.

College Road, Fishponds, Bristol

Phone: Bristol 653268 & 654205 Grams: Drinkrite, Fishponds, Bristol

GONGGRAT



GUYS...

The Trafalgar campaign lasted just 4½ hours. The Victory V action lasts all year round. The big guns of advertising have set the ball rolling. The fickle English climate will do the rest. So carry on the good work, stockists. England Expects Victory V every month of the year.

VictoryV

FRYER & CO-VICTORY FACTORIES-NELSON-LANCS.

A NEW DISPLAY for

SHAVING BRUSHES

Each brush Guaranteed for 2 years



FREE with PARCEL No. 910 containing...

4 pcs. No. 20 PURE BRISTLE BRUSH Each in window carton RETAIL PRICE 4/11 EACH 4 pcs. No. 21 PURE BRISTLE BRUSH Each in acetate tube RETAIL PRICE 6/9 EACH 4 pcs. No. 22 PURE BRISTLE BRUSH Each in acetate tube RETAIL PRICE 8/6 EACH W.S.P. 45/9 Plus P.T. RETURNS 80/8

PROGRESS SHAVING BRUSH (VULFIX) LIMITED MOTTRAM STREET, STOCKPORT, CHESHIRE. Tel. STO 2147

London Office: 143 New Bond St. London W.I Tel. HYDe Park 3886-7



GEVAERT ARE OUT FOR A BIG SLICE OF COLOUR FILM SALES



GEVACOLOR IN THE NATIONAL PRESS from early April

Whole page advertisements, showing the retailer recommending Gevacolor Film. Large spaces, featuring top photographers like Bert Hardy. And smaller spaces adding weight.



GEVACOLOR IN THE AMATEUR PHOTOGRAPHIC PRESS from early April

In 19 papers and magazines that reach the keen types, many whole page advertisements, often in full colour, will spotlight top photographers, who will all testify to the exceptional qualities of Gevacolor.



GEVACOLOR IN THE CINEMAS from early May

A 60 second film in colour will be shown in over 200 cinemas in leading seaside resorts and in the main cities throughout the country. A striking, memorable message comes across strongly: 'Be an artist with Gevacolor Film'.

SELL GEVACOLOR - JOIN THIS 3 PRONGED BID AND BE ON BETTER TERMS



GEVAERT LIMITED GREAT WEST ROAD BRENTFORD, MIDDLESEX TELEPHONE: ISLEWORTH 2131



PEOPLE

will read **Radio Times** with advertising for

Amm-i-dent

Amm-i-dent's strong message to mothers to guard their children's teeth against harmful mouth acids will have the biggest audience it could hope for. In Radio Times. Amm-i-dent advertising will be

seen by over 7½ million housewives. Because Radio Times has more housewife readers than any other single publication in the country. They will see Amm-i-dent's message again and again. In the nine days each issue of Radio Times spends in their homes. Nine days of regular reference.

By advertising in Radio Times, Amm-i-dent are building strong sales for you.

REMEMBER, IT PAYS TO STOCK AND DISPLAY GOODS ADVERTISED IN

Radio Times

TELEPHONE CENTRAL 6565

Address Box Number Replies to: THE CHEMIST AND DRUGGIST, 28 ESSEX ST., STRAND, LONDON, W.C.2

EASTER 1963

The latest dates for acceptance of Classified Advertisements over the Easter period are as follows:-

ISSUE

COPY DATE

Not later than 4 p.m. on

APRIL 16

APRIL 20, 1963

BITTERNE (nr. Southampton), New monopoly parade of 11 shops with maisonettes, serving extensive residential estate. Available on 21 year lease at £750 p.a. Ideal opportunity for establishing a pharmaceutical chemist, Full particulars, Manners, Hearne & Manners, 8-10 Wigmore Street, W.1. C 5158

PREMISES

SHOPS TO LET. Millfield Farm Estate, Leicester, with s./c. maisonette and garage. Two units remain in new parade of 10 shops serving large estate and surrounding district, Traders represented include butcher, greengrocer, hardware, hairdresser, Co-operative, etc. Rent from £580 per annum exclusive. Apply: Jones, Lang, Wootton & Sons, 58 St. James's Street, S.W.1. HYDe Park 6040, or H. & F. Tarratt & Sons, 16 Market Street, Leicester. C 8096

BUSINESSES FOR DISPOSAL

BELFAST, N.I. Well established pharmacy, best position, city centre, first class turnover increasing yearly, excellent profits, Part purchase price could remain outstanding to approved purchaser, R. J. McConnell & Co., Estate Agents, 11 Rosemary Street, Belfast, 1. C 5159

DEVON MARKET TOWN, Lease of old-established chemist's business on prominent corner site in large West Country town, 14 years to run at £260 p.a, Property includes attractive 6-roomed flat over shop, 40 ft, display windows, Good storage, Wine licence. Veterinary a/cs, Turnover in excess of £14,000, Price, £4,250, s.a.v, John Lewington & Co., Estate Agents, Bideford. C 5153

DRUG STORE. Full Heath & Heather agents, Turnover nearing £5,000, West Country town. Outstanding opening for chemist, near three doctors, N.H.S, being turned away, Good living accommodation over, near two large grammar schools. One young lady assistant, and owner, staff. 9 miles from Exeter. Mudge & Baxter, 44 Bedford Street, Exeter. Phone: Exeter 74016.

GOSPORT, South Hants, as a going concern, Owner retiring, Retail dispensing chemist's business with living accommodation, Only £3,750. Full details, apply Richard Austin & Wyatt, 79 High Street, Fareham, Tel.: 4211. C 5151

APPOINTMENTS

BARNET GENERAL HOSPITAL, WELLHOUSE LANE, BARNET, **HERTS**

(490 beds)

Locum Pharmacist
required for several months from 1st June. Application to Hospital Secretary with names of two referees. C 8133

BETHNAL GREEN HOSPITAL, CAMBRIDGE HEATH ROAD, LONDON, E.2
Senior Pharmacist
Modern department approved for training students, Salary scale £810-£1,060 per annum, plus higher qualification allowance and London Weighting

plus higher qualification allowance and London Weighting.
Please apply Hospital Secretary, giving details of age, training, experience and two names C 625

CENTRAL GROUP HOSPITAL MANAGEMENT COMMITTEE

Locum Pharmacist

Coum Pharmacist
for holiday relief duty in the hospitals of the
Group, 13th May to 28th Sept. inclusive.
Salary 19 gns. p.w. Apply to Chief Pharmacist, Bethnal Green Hospital, Cambridge
Heath Road, London, E.2. C 634

CELL BARNES HOSPITAL, ST. ALBANS, HERTS

Chief Pharmacist

Chief Pharmacist
required for this modern progressive hospital
for the sub-normal, within easy reach of
local amenities and London. Salary scale for
Category I Hospital is £855 rising to £1,165
p.a. Three-and-a-half weeks annual leave.
Application forms from the Group Secretary,
Harperbury Hospital, St. Albans, Herts, which
should be returned by April 26. C 8157

CENTRAL GROUP HOSPITAL MANAGEMENT COMMITTEE

Locum Pharmacist

in charge at Mildmay Mission Hospital for holiday relief duty; 17th to 29th June, 1963. Salary £23 2s, per week. Apply to Chief Pharmacist, Bethnal Green Hospital, Cam-bridge Heath Road, London, E.2. C 633

DULWICH HOSPITAL EAST DULWICH GROVÉ, LONDON, S.E.22

Senior Pharmacist
Applications invited for the post of Senior Pharmacist, Salary scale £810—£1,060 plus London Weighting allowance, Part-time considered, Apply Chief Pharmacist, C 8145

HAMMERSMITH HOSPITAL AND POST-GRADUATE MEDICAL SCHOOL, DU CANE ROAD, LONDON, W.12 Pharmacist

Pharmacist required at above General Post-graduate Teaching Hospital (Category V), Post offers varied work and excellent experience, Pleasant working conditions, Previous experience not essential, Whitley salary scale £725-£970 per annum, plus London Allowance. Commencing salary within this scale according to experience, Applications stating age, qualifications and experience, and naming two referees, to Chief Pharmacist, by April 27.

C 8159

ENFIELD GROUP HOSPITAL MANAGEMENT COMMITTEE

Senior Pharmacist required for duties within the Group, based at Chase Farm Hospital, Salary scale £810-£1,060 plus London Weighting Allowance. Applications giving full details of qualifications and experience together with the names and addresses of two referees to the Group Secretary, Chase Farm Hospital, The Ridgeway, Enfield, Middlesex, quoting reference 75/63.

DULWICH HOSPITAL, EAST DULWICH GROVE, LONDON, S.E.22

Locum Pharmacist
required immediately, full-time or part-time,
Apply Chief Pharmacist. C 8147

GROVE PARK HOSPITAL,

LEE, S.E.12

Chief Pharmacist

Category 11, f940 to £1,260 plus London
Weighting allowance. Applications naming
two referees to Group Secretary, Lewisham
Hospital, High Street, S.E.13. C 632

HAMMERSMITH HOSPITAL AND POST-GRADUATE MEDICAL SCHOOL, DU CANE ROAD, LONDON, W.12

Locum Pharmacist
required for several weeks commencing April
29. Salary £19 19s, per week. Applications to
C 8158

HOSPITAL OF ST. JOHN AND ST. ELIZABETII, 60 GROVE END ROAD LONDON, N.W.8

Locum Apothecaries' Hall Dispenser required August 6-21 Whitley Scale, Apply Secretary, Cunningham 5126. C 5164

LEWISHAM HOSPITAL, HIGH STREET, S.E.13 Senior Pharmacist

required. Applications stating age, qualifica-tions and experience, and names of two referees to Chief Pharmacist. C 636

QUEEN CHARLOTTE'S AND

QUEEN CHARLOTTE'S AND CHELSEA HOSPITALS

Pharmacist

Applications are invited for the above post at Queen Charlotte's Maternity Hospital. Accommodation may be available, Enquiries to the Chief Pharmacist and applications giving details of age, qualifications and experience together with the names of two referees to the House Governor, 339 Goldhawk Road, Hammersmith, W.6.

C 8141

Appointments—Continued

MORGANNWG HOSPITAL MANAGEMENT COMMITTEE Pharmacist

Pharmacist
Applications are invited for the appointment of a Pharmacist to undertake duties at Hensol Castle Hospital for the Sub-Normal, nr. Pontyclun and Morgannwg Psychiatric Hospital, Bridgend, Glam.

The salary, which is at present £725 x £30 (2) x £35 (3) x £40 (2)—£970 per annum, and conditions of service are those agreed by the Pharmaceutical Whitley Council of the Health Service.

Applications giving full details of qualifications, past and present appointments, together with names and addresses of two referees to be sent to the Group Secretary, Morgannwg Hospital, Bridgend.

C 5162

ROYAL EYE HOSPITAL

ST. GEORGE'S CIRCUS, S.E.1
Qualified Dispensing Assistant
required, Applications in writing to Hospital
Secretary.

C 8162

ROYAL FREE HOSPITAL

required at the above hospital from June 24 to July 20. Salary £19 19s, per week, Applications with names of two referees should be addressed to the Group Chief Pharmacist, Royal Free Hospital, Gray's Inn Road, London, W.C.1.

ST. ANDREW'S HOSPITAL,

DEVONS ROAD, BOW, E.3
Senior Pharmacist or Pharmacist
required. Whitley Council salary and conditions. Application forms obtainable from the
Group Secretary, Thames Group H.M.C., St.
Clement's Hospital, Bow Road, E.3. C8153

SHOTLEY BRIDGE GENERAL HOSPITAL

HOSPITAL,
CONSETT, Co. DURHAM
Pharmacist

Applications are invited from Registered Pharmacists for the above appointment vacant early June. This is an acute hospital of 529 beds and will be the site of a new district general hospital of 900 beds on which work has already commenced, Modern Department equipped with facilities for manufacturing and sterile work. Salary £725 per annum, rising by annual increments to £970 per annum, Residential accommodation is available for female applicants.

Applications, giving details of age, education and experience and naming two referees to Hospital Secretary.

C 8102

ST. CLEMENT'S HOSPITAL, BOW ROAD, LONDON, E.3 Pharmacist

in sole charge required, part-time (24 hours p.w.) for this 117 bedded psychiatric hospital with out-patients department and Day Hospital, Application forms obtainable from the Group Secretary, Thames Group H.M.C., St. Clement's Hospital, Bow Road, E.3. C 8154

THE LONDON HOSPITAL, WHITECHAPEL, E.1

Locum Pharmacist

required immediately for several weeks, Salary £19 19s, per week, Apply to House Governor, C 8164 Governor.

THREE COUNTIES HOSPITAL,

ARLESEY, BEDFORDSHIRE

Dispensing Assistant

Applications are invited for Dispensing Assistant. Salary and Conditions as Whitley Council scale, £425 at age 22 or over, rising to £575 per annum, Accommodation available for single man or woman applicant, Applications, stating age and experience, together with the names and addresses of two referees should be sent to The Medical Superintendent.

C 576

SHREWSBURY GROUP 15 HOSPITAL MANAGEMENT COMMITTEE,

COMMITTEE,

SHELTON MENTAL HOSPITAL,

SHREWSBURY

Chief Pharmacist

Applications are invited from suitably qualified ladies and gentlemen for the post of Chief Pharmacist, single-handed, at the Shelton Hospital (Mental). House available.

Salary: £855 x £35 (2) x £40 (6) to £1,165.

Conditions of Service as prescribed by the Pharmaceutical Council of the Whitley Council.

Annual Leave 21 days, plus all Bank Holidays. The appointment will be subject to the provisions of the National Health Service (Super-

annuation) Regulations,
Applications, accompanied by the names and
addresses of three referees, should be addressed to the Medical Superintendent, Shelton Hospital, Shrewsbury.

C 8139

SOUTHMEAD HOSPITAL, BRISTOL (670 beds)

Pharmacist
required at Southmead Hospital. This post offers wide experience in modernised department,

Applications stating age, qualifications and experience to be sent to the Group Secretary, Southmead Hospital, Bristol, forthwith, C 8161

WEST PARK HOSPITAL, EPSOM, SURREY

required for duty in an active Psychiatric Hospital. Five-day week, salary range £810 to £1,060 plus London Weighting, Temporary accommodation available for single person. Further information on request from Chief Pharmacist, EPSOM 5234. Apply immediately, naming two referees, to THE GROUP SECRETARY, WEST PARK HOSPITAL, EPSOM.

ST. STEPHEN'S HOSPITAL,

CHELSEA, S.W.10
Dispensing Assistant
required immediately, Commencing salary by arrangement, Apply Chief Pharmacist, C 8146

SOUTHEND-ON-SEA HOSPITAL MANAGEMENT COMMITTEE

Post-graduate Student

Post-graduate Student required in the pharmacies of the hospitals in the Southend-on-Sea Group, Salary £485 per annum. The hospitals are situated in pleasant surroundings and the post offers excellent opportunities for experience in all branches of pharmaceutical work, including dispensing for in-patients and for patients from a busy consultative out-patients' department manufacturing sterilising dressings and from a busy consultative out-patients' department, manufacturing, sterilising, dressings and instruments. Applications, stating age, particulars of education, etc., with the names of two referees, should be sent to the Secretary, General Hospital, Southend-on-Sea, as soon as possible.

SUSSEX MATERNITY HOSPITAL,

BRIGHTON

Chief Pharmacist

Category I required for 34 hours per week.

Salary at the rate of £745 7s, per annum rising to £1,015 12s, Applications with full particulars and references to Administrative Officer. C 5152

WEST PARK HOSPITAL, **EPSOM, SURREY**

Dispensing Assistant certificated, full- or part-time, Five-day week, Whitley Council conditions, Salary scale £290 at age 18 (£440 at age 22 or over) rising to £580, plus London weighting, Single accommodation available modation available.

Apply immediately, naming two referees, to the GROUP SECRETARY.

C 8152

SITUATIONS VACANT WHOLESALE

MERCK SHARP & DOHME

require additional

MEDICAL REPRESENTATIVES

Are you ambitious and looking for a rewarding career with opportunities for advancement with a leading pharmaceutical organisation? You are invited to apply for territories in the following areas:-

- (1) London
- (2) South Wales
- (3) South-West England

Applicants should have had a good education, should be a pharmacist or possess a background in pharmacy and/or medicine, and be in the age group 23-35. Previous experience is not essential as comprehensive training will be given.

HOSPITAL REPRESENTATIVE — Applications are also invited from EXPERIENCED Medical Representatives for the post of:-

HOSPITAL REPRESENTATIVE

to cover South Wales/Pt. Gloucestershire.

The Company operates a pension and life assurance scheme and a car is provided. A good commencing salary will be paid, commensurate with age and experience.

Apply: Sales Manager, MERCK SHARP & DOHME LIMITED, HODDESDON, HERTS



C 8128

SITUATIONS VACANT WHOLESALE

EDUCATIONAL

THE UNIVERSITY OF MANCHESTER

Applications are invited for posts at the grade of ASSISTANT LECTURER in the Department of PHARMACY, Applicants should possess a good honours degree in Pharmacy, or an equivalent qualification, Since more than one post is to be filled, applicants specialising in any one of the subjects Pharmaceutical Chemistry, Pharmaceutics or Pharmacognosy will be considered. Salary on a scale from £1,000 x £50 to £1,150 per annum. Duties to commence on 1st October, 1963. Membership of F.S.S.U. and Children's Allowance Scheme, Applications should be sent, not later than May 8th, 1963, to the Registrar, the University, Manchester, 13, from whom further particulars and forms of application may be obtained. C 8124

SITUATIONS VACANT RETAIL (HOME)

JOHN KELSEY CHEMISTS LTD, Immediate appointments, Purlcy and Cambridge, for pharmacists/branch managers, Good salaries, Pensionable, Progressive expanding company. Vacancies shortly, Oxford, Corby, Newport (Mon.), Houghton Regis, Redditch, New premises, Most with maisonette, Director Superintendent, 21 Lime Street, E.C.3. C 5124

PHARMACIST REQUIRED for high-class pharmacy. Apply: The Manager, Cooper, Son & Co. Ltd., 120 Gloucester Road, S.W.7. Phone: FRO, 2824.

WHOLESALE

DEVELOPMENT CHEMIST

A vacancy exists for a chemist with wide experience in the pharmaceutical industry for process research in the development of fine chemicals, The Managing Director, Therapharm, Ltd., 86a Richmond Road, Kingston, Surrey.

EXPERIENCED REPRESENTATIVE

required by long established firm of wholesale manufacturing chemists to cover their North and West London territory. Progressive position for right man, guaranteed salary, fiveday week, pension scheme, car provided. Apply Box C 628.

WRIGHT LAYMAN & UMNEY LIMITED

manufacturers of Wright's Coal Tar Soap and Specialities, require two experienced Representatives. One to cover the West London area and one based on or near Cardiff to cover the counties of Glamorganshire, Monmouthshire and Gloucestershire, Applicants should already be calling on chemists and preference will be given to candidates in 25/35 age group. A staff contributory superannuation scheme is in operation. The company provides a car and usual expenses, All replies will be acknowledged and treated in confidence, Write, giving fullest details of carcer to date, age, etc., to the Sales Manager, Wright Layman & Umney Limited, 46 Southwark Street, London, S.E.1.

a personal invitation

I would like to hear from you—in strict confidence, of course—should you be interested in joining a first-class team of medical representatives. The company, whose products are already well known in this country, is part of a leading and progressive international organisation with research facilities among the finest in the world. We want well-educated men with pharmaceutical or medical training, a strong personality and—above all enthusiasm to match the rest of the team. There are now vacancies in West Yorkshire, Newcastle, Sheffield, Hampshire and the Republic of Ireland. We offer a most attractive salary, with generous expenses, allowances and bonuses. There is also a life assurance and pension scheme. A Triumph 1200 is provided with the job. Why not drop me a line? Or, if it is easier, telephone me: Watford 34401.

Peter Hairsnape Astra-Hewlett

King George's Avenue, Watford, Herts Telephone: Watford 34401

C 8155



MOORE MEDICINAL PRODUCTS LIMITED

invite applications for the following ethical medical representatives:

- 1. SENIOR SPECIALIST REPRESENTATIVES
 - (a) London; (b) Manchester/Liverpool. Candidates should be mature medical representatives with particular experience in specialised detailing to Consultants and Senior Physicians, etc. Age preferred 30-45.
- 2. AREA REPRESENTATIVES. Vacant areas throughout England and Wales.

Candidates should have previous selling experience and a pharmaceutical/medical background is desirable. Age preferred 25-40.

These positions carry good commencing salaries and expenses. Pension Scheme operated and company car provided (replaced annually). Excellent opportunities for advancement and holiday commitments honoured.

Apply in confidence (with photograph if possible) to :-

General Manager,

MOORE MEDICINAL PRODUCTS, LTD., (P.O. Box 78), Waverley House, Aberdeen.

C 8156

Situations Vacant—Continued

SITUATIONS VACANT W

WHOLESALE

ALKA-SELTZER — Representatives required, Miles Laboratories Ltd, wish to appoint Representatives aged about 25 to the following areas:

South Lancs and Cheshire Part Essex and East Anglia Part Essex and East London North-west and East London

Good salary, incentive scheme, pension scheme; car provided; expenses. Applicants, who should be experienced and first-class in the merchandising field, should apply in their own handwriting, giving full details of education, commercial career, and Service career (if any), to Sales Manager (Domestic), Miles Products Division, Miles Laboratories Ltd., Stoke Court, Stoke Poges, Slough, Bucks.

C 8149

CHEMIST REQUIRED for analytical and developmental work to initiate new department for a pharmaceutical company with interesting programme ahead. Reply with full particulars of experience to Box C 5155.

HINDERS LIMITED

member of the

SMITH & NEPHEW

group of companies

require a representative in the Chiropody field for the Midland area. Salary, commission, expenses. Car provided, pension scheme. Apply in writing, stating age and experience, to:—

HINDERS LIMITED 174/192 Estcourt Road, London, S.W.6

C 5161

INTERNATIONAL Pharmaceutical Company with world-wide ramifications requires personable young man 25/28 in their London office (Waterloo), Sound administrative experience preferably in the pharmaceutical industry, knowledge of export, factory planning and inventory control procedures advantageous. Detailed applications with full curriculum vitae stating salaries earned to Mr. Saunders, Sterling Drug International, 75 York Road, S.E.1, C5157

SITUATIONS WANTED

EXPERIENCED dispensing assistant (male), conscientious, available now, London area. Hospital dispensary or wholesale department Interview. Excellent references. Box C 5113.

AGENTS

AGENTS required in many areas for a new multi-vitamin tablet, sold only to chemists, good commission terms. Box C 5142.

OVERSEAS

ADVERTISERS wish to appoint overseas agents for their ethical preparations, only firms who are able to produce first-class references should apply, Box C 5143.

WANTED

CASH FOR CAMERAS!!! Best prices paid for German and Japanese apparatus that has become obsolete or is "sticking," Quantity unlimited. The Camera Co., 320 Vauxhall Bridge Road, S.W.1, VIC, 5483. C 627

WE WILL PURCHASE for cash a complete stock, a redundant line, including finished or partly finished goods, packing raw materials, etc, No quantity too large, Our representative will call anywhere. Write or telephone: Lawrence Edwards & Co., Ltd., 6/7 Wellington Close, Ledbury Road, London, W.11. Tel.: Park 3137-8.



LADY MARKETING ASSISTANT (PHARMACIST)

Applications are invited from lady Pharmacists for an interesting post calling for initiative in the Marketing Department. Experience in hospital pharmacy would be an advantage.

Applicants should be aged between 25 and 35 years and be Members of The Pharmaceutical Society. A good salary will be paid related to qualifications and experience.

A contributory pension and life assurance scheme is in operation.

Applications, giving details of age, education, qualifications and experience, should be addressed in confidence to:—

The Personnel Manager, EVANS MEDICAL LTD., Speke, Liverpool, 24

C 8150

BUSINESS OPPORTUNITIES

"ADVANTAGES OF TRADING AS A LIMITED COMPANY" 3/-, post free, may save you thousands of pounds of personal income tax—New Ready-made Company registrations £25, for Chemists, Fancy Goods, Photography, Seientific Instruments, Investment, Stocks and Shares and 1,001 other businesses, Write call or 'phone, Dept./55, Business Economy, 156 Strand, London, W.C.2 (Tem, 8377/8; 2294/5) and 19 Walker Street, Edinburgh, 3 (Cal, 1167/9), C 622 MANLY MAN'S BELT. Nationally advertised "obtainable from chemists," 35/-. Full trade terms, Order by waist size from Manly Co., Manor House, Worcester Park, Surrey. DERwent 3877.

TENDERS

TENDERS are invited for the supply

SURGICAL DRESSINGS

to a number of Hospital Management Committees in the Leeds Region for a period of twelve months commencing 1st July, 1963.

FORMS OF TENDER may be obtained from the Supplies Officer, Leeds (A) Group Hospital Management Committee, St. James's Hospital, Leeds, 9.

CLOSING DATE for the submission of tenders is Monday, 29th April,

H. INMAN, Secretary to the Leeds (A) Group H.M.C.

St. James's Hospital, Beckett Street, Leeds, 9.

C 8123

MACHINERY WANTED

USED PLANT. Following items required by South African manufacturing chemist:—
Manesty Fitzmill Granulator (stainless steel); Manesty F. & E. machines; sugar coating pans; tablet filling and counting appliances; hammer mills; steam jacketed pans; Graffil or other type liquid filling machine: stainless steel containers 25-50 gallons; portable motorised mixer; homogeniser, Offers to J. A. Ewing & Co. (London) Ltd. (Department RJF), Finsbury Court, Finsbury Pavement, London, E.C.2.

MACHINERY FOR SALE

50-33-GALL, STAINLESS STEEL portable tanks with $1\frac{1}{4}$ in, outlets, Details from C. Skerman & Sons, Ltd., 10 Parson's Green, S.W.6. RENown 6402. C 8098

MISCELLANEOUS

COHAR FOR CARPETS offer 15%—20% saving, all leading makes, carriage free U.K. Huge saving on Venetian Blinds, Sewing Machines, Typewriters, Parquet Tiles, Furniture, Washing Machines, Refrigerators, Lawn Mowers and Power Tools, Showrooms at London, Leicester, Sheffield, Bradford, Leeds, Hull, Middlesbrough, Manchester, Newcastle, Bristol, Hadleigh (S.), Liverpool, Cardiff, Swansea, Aberdeen, Edinburgh, Cambridge, Plymouth, Bournemouth, Brighton, Glasgow, Dundee, Birmingham, Preston, Blackpool and Belfast, Write:—Cohar, Distributors, 47 Oswald Street, Glasgow, C1. Or phone: Glasgow CENtral 8325, Birmingham MIDland 8333, London CHAncery 2345, Manchester CENtral 2321, C600

FREE SAMPLES in various colours of smart economical self-adhesive shelf pricing system, Cooper Laboratory Ltd., West Drayton, Middlesex. C 5075





Golden Dawn—Summer Green. Easy to read magnified weight scale. Each scale tested before dispatch, individually cartoned and guaranteed for 5 years. Made in England by British craftsmen.

NOW ONLY— 52/6 TAX PAID

* FLEETWAY Manufacturing Co. Ltd., Charlton Rd. Edmonton N.9

A MEMBER OF THE WALLEY GROUP OF COMPANIES



Today, more than ever, independent chemists are turning to UNICHEM and all it stands for against the competition of the multiples and the encroachment of the supermarkets and grocery chains. By joining UNICHEM for collective action, they are finding a new sense of security in their own businesses. They also get these free benefits: best-term buying; day or night ordering; constant availability of ethicals and sundries; a share in the profits; a chance to buy shares; sales aids; advisory services. UNICHEM is wholly sponsored and controlled by retail chemists. If you haven't yet joined UNICHEM, ask for details today—there's no subscription.

DEPOTS AT

Broadwater Road, London, S.W.17. Fortescue Road, London, S.W.19. 8 Westbury Road, London. E.17

Pool Road, Nuneaton, Warwicks.

Balham 1151 Cherrywood 3322 Coppermill 5566 Nuneaton 4210

HEAD OFFICE

UNICHEM LTD. CROWN HOUSE, MORDEN, SURREY. Cherrywood 3831



means collective security for independent chemists